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Ought Montana to Aid it

If So, How?

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A Report to

Governor JOS. K. TOOLE

Being a Supplement to a Report on the State Arid Land Grant
Commission by

F. H. RAY, Ass't State Examiner

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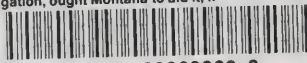


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CONTENTS

Report on irrigation conditions, legal and physical, in Montana, showing the existing evils of insecure water rights, uncertain titles, overappropriated streams, litigation, obstruction to national aid and private investment, quotations from Government Reports, recommendations based on those made by Government Experts; and a proposed law, in full, intended to remedy present and evergrowing irrigation evils, which law is based on the twelve years successful working of the Wyoming law, and the recommendations of the California Commission. Also a brief statement about the Grant of 1,000,000 acres arid land by the United States, to Montana, conditioned upon its reclamation; the efforts of State Arid Land Grant Commission to reclaim, defects of the law under which that Commission work, with a full text of proposed law abolishing said Commission and creating instead a successor, the Carey Land Act Board, composed of Governor, State Engineer and Register State Land Office, to serve without extra compensation, which Board shall at slight expense to State cause to be reclaimed and settled the granted lands.

SUPPLEMENT TO

Report on Arid Land Grant Commission.

Helena, Montana, Dec. 20, 1902.

GOVERNOR JOS. K. TOOLE,
Helena, Montana.

Dear Sir:—In examining Arid Land Grant Commission matters I noted that Wyoming had reclaimed much more land, under the Carey Act, than any other state. Interest in the subject led me to a comparison of irrigation conditions, legal and physical, existing in various states. As a result of such study I became convinced there was urgent need for the enactment by Montana of an irrigation code. That conviction prompts submitting to Your Excellency and the public the following. During my investigation I learned that Director S. Fortier of the Montana Experiment Station and Mr. E. C. Kinney, manager of West Gallatin Irrigation Co., were working on the same subject and had arrived at conclusions similar to mine. Both those gentlemen assisted in framing the proposed law herewith and are entitled to credit for persistent endeavors in behalf of this reform.

The subject affords material for a volume; the limit of this communication compels omission of much convincing data. Those who wish more information will find Bulletins Nos. 58, 96, 100, 86 and 104, issued by the Office of Experiment Stations, D. C., very interesting and profitable. All are obtainable at the State Historical Library or the Helena Public Library and some from the issuing office.

IRRIGATION—OUGHT MONTANA TO AID IT, IF SO.
HOW?

The future of Montana, her growth in wealth and homes, depends first and most on the development of her agricultural resources and that means irrigation, since only in Flathead and Cascade Counties are crops produced without.

Following are some facts supporting above assertion:

Neither Stockraising or Mining Likely to Increase.

Stockraising, under present conditions, has apparently reached its maximum and is not likely to add population or assessable values until our ranges are supplemented with feed raised by irrigation.

The increase in Montana's metal output for the past decade has been due to copper alone and that is declining twelve per cent as compared with 1900. A glance at the products of our leading industry, for a series of years, furnishes a fair basis for estimating its future. In 1887 the gold yield was \$5,978,000. No year since has equalled that, the amounts varying from \$2,890,000 to \$5,247,000; the average for the past fourteen years being \$4,074,447. Our silver output in 1889 was \$19,393,000, since when it has ranged from \$16,575,000 in 1894 to \$22,886,000 in 1895; with an average for the last thirteen years of \$20,507,225. The lead product reached its maximum, \$1,229,000, in 1891; never since has it reached a million. Last year it fell to \$498,600, and its average for eleven years has been \$853,923. Only copper has shown an increase. A production of \$15,100,000 in 1888, fluctuation above and below that amount until 1896, then there was \$10,000,000 increase sustained for three years, followed by a total of \$41,000,000 in 1899 and in 1900. This maximum fell to \$36,751,000 in 1901, and the 1902 record will not be more, so that the past two years each show a decline of one-eighth.

Montana's total output of the four metals above which reached over \$68,000,000 in 1899 and \$63,746,000 in 1900, fell to \$60,387,000 last year and the current years total will probably be about the same, a decline of almost twelve per cent. Since in these totals silver is reckoned at coinage value of \$1.29 per ounce instead of the market price (made in London) there must be deducted over \$10,000,000 from above totals to obtain the cash returns.

Is there in such data or existing conditions any warrant for expecting a material increase in the yield of metals or growth in population? I doubt if we can reasonably hope to do more than maintain the record made in 1900. It is probable, however, that the development of our coal, our oil, and perhaps iron resources will add considerable wealth and population.

FARMS PRECEDE FACTORIES.

Montana possesses two conditions necessary to manufacturing, viz: abundant water power and crude material, but the number of consumers in the State is small and freight rates handicap efforts to reach distant markets. Why it is that at Great Falls alone over 500,000 horse power runs to waste while Montana produces sixty per cent of the United States copper yield, leads in wool, ships annually \$10,000,000 worth of live stock, sends all that raw material thousands of miles to factories and then brings back part of the manufactured articles, paying freight both ways, deserves earnest study.

According to the United States Census, from 1890 to 1900, Montana increased her manufactured output over \$8,000,000. The population increased 111,000 during the same period which probably accounts for growth in manufactures therefore a certain way to insure continuance of that growth is to increase population by fostering irrigation. The rule appears universal that farms precede factories.

We are handicapped and our industries are retarded by the increased cost of living due to importing farm products. Data gathered by C. H. Edwards, Secretary of the State Horticultural Board's shows that Montanians paid other states \$5,500,000 during the year 1901, for agricultural products that can be grown here. Not one dollar of this comes back in reciprocal trade.

In view of all the foregoing is it not of paramount importance that we aid irrigation, and is not the conclusion indisputable that our next increase in homes and wealth must come principally from agricultural development? In what way can this be accomplished?

NATIONAL GOVERNMENT AID.

It will be helpful to briefly consider what has been done by National and State Governments to foster irrigation and to critically compare Montana with other states. The Federal Government through its Geological survey and co-operating with our Experiment Station has done valuable work in stream measurements, surveys and investigations, but has accomplished only a small fraction of what is needed. California, Wyoming, Idaho, Nebraska, Utah and other states have supplemented government work by that of their own irrigation department, greatly to their benefit; and unless Montana is willing to stay far behind she must pursue a similar course.

The National Irrigation Law is a long advance step for which

much credit is due President Roosevelt, Geo. H. Maxwell, Elwood Mead, various commercial associations and others. However, the idea held by some, that since that law was enacted the entire work of reclaiming arid land should be left to the Federal Government is wrong. That law aids by doing what was impracticable for single states to do, but it does not supercede or interfere with state work, and leaves much to be done by each state. The laws of a state relating to control, appropriation, use or distribution of water in irrigation, whether good or bad, are not effected by the National Law. That Law (Sec. 8) contains a wise provision that the right to use of water acquired under it "shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right."

To what extent and how rapidly arid land in Montana will be reclaimed by the Federal Government under the act approved June 17th, 1902, no one knows. At best it is likely to be slow. About \$9,000,000 is now available for investigation and construction in sixteen states and territories, in each of which examinations, surveys and construction are authorized. Montana is only one of sixteen. This "reclamation fund," being derived from sale of public lands in these states and territories, "less 5 per cent for educational and other purposes," will not increase rapidly, nor will Congress appropriate more until some large area has been reclaimed and serves as an object lesson. Already two policies for the expenditure of this fund are advocated; one that three or four of the best projects be selected and constructed first; the other that numerous small ones shall be given preference. Should this last method be pursued there will be an unseemly scramble, petty local jealousies will divide the west, and national irrigation work be retarded. If the policy of large projects prevails these will command eastern attention and support by their magnitude and possibly lead to further appropriations.

Fortunately Montana offers, in the St. Mary's Lake, a project of magnitude that has two advantages not possessed by any other, viz: absence of both land and water right complications. An examination of its merits from an engineering standpoint has already determined the feasibility of reclaiming 100,000 acres at an estimated cost of \$10 per acre. Further investigation is being made to ascertain if the reclaimable area can not be greatly increased.

Suppose this St. Mary's project be among those selected for early construction and that it reclaims even 200,000 acres what

warrant have we for expecting additional reclamation by the Government in Montana for many years thereafter? Is it not more than probable that projects in some of the other fifteen states and territories will receive attention? Especially projects in those states having good irrigation laws and departments. This phase of the subject has had consideration by the National Government. Pres-Roosevelt in his first message to Congress criticised State irrigation laws saying "The security and value of the homes created depend largely on the stability of titles to water; but the majority of these rest on the uncertain foundation of court decisions rendered in ordinary suits at law. With a few creditable exceptions the arid States have failed to provide for the certain and just division of streams in time of scarcity. Lax and uncertain laws have made it possible to establish rights to water in excess of actual use or necessities. In the arid states the only right to water which should be recognized is that of use. In irrigation this right should attach to the land reclaimed and be inseparable therefrom. Granting perpetual water rights to other than users, without compensation to the public, is open to all the objections which apply to giving away perpetual franchises to the public utilities of cities."

MONTANA'S LAX LAWS OPERATE AGAINST OBTAINING NATIONAL AID.

Since 1898 Montana's irrigation laws have appeared in Government Reports (Bulletin No. 58) as conspicuous examples of bad laws, but as yet nothing has been done to remedy them and to-day these faulty laws operate against our obtaining National aid. Secretary Wilson's Report for 1901, referring to state irrigation laws and national aid, says: "If the States are to control the water supplies, there should be satisfactory assurances that whatever is made available by public funds shall benefit the actual users of water and not enrich the holders of speculative rights. In some states there is such assurance. These are entitled to National aid, because it is known from present conditions that such aid would be clearly beneficial. In other states rights have been established to many times the existing supply yet there is nothing to prevent claims being filed, new diversions made and unending litigation over the conflicts thus created. For Government to provide an additional supply on these streams before existing controversies are settled would simply aggravate and intensify the evils of the present situ-

ation. Whatever aid Congress extends should be conditioned on the enactment of proper irrigation codes by the States and made to promote the greater efficiency and success of such laws rather than interfere with their operation."

Remembering that sixteen States are to participate in the benefits of Government funds, Montana ought to immediately enact an irrigation code embodying the recommendations of the Government. Until done there is great danger that rival states will successfully urge withholding from us and spending on their projects because of their better irrigation laws.

LITTLE EFFORT HAS BEEN MADE BY OUR STATE.

We ought not to depend entirely on National aid. Our indifference to all the other opportunities for growth by irrigation should cease. At present, other states, possessing less natural advantages than Montana, have each under irrigation hundreds or thousands of acres more land and far surpass us in agricultural output. Not until we remove the hazards and obstacles due to bad laws and make irrigation investments as safe and inviting as do rival states can we hope that capital will look with equal favor upon us.

Little has been done by our State Government to further irrigation. In 1895 there was created a State Arid Land Grant Commission "for the purpose of enabling the State to accept the offer of the United States" (1,000,000 acres arid land) under the Carey Act. See Pol. Code, Sec. 3530 to 3547. An appropriation of \$2,000 was made for the use of said Commission. This Commission was appointed by Gov. Rickards and had examinations made of arid lands in eastern Montana but did not succeed in reclaiming any. For surveys, salaries, traveling and other expenses they used \$706.64 of the appropriation, incurred bills, subsequently paid by their successors, \$929.65, and under a court decision issued warrants, as yet unpaid, on the Federal Grant Reclamation Fund, for \$2,289.00. The State is not directly liable for these warrants and can not be required to pay them until funds accrue as a profit from lands reclaimed under this act. The Rickards Commission, for political reasons, resigned in 1897. The Legislature of that year amended the law (see page 181 Fifth Session), appropriated \$5,000 and Gov. Smith appointed a new commission. That commission expended the appropriation and incurred considerable indebtedness for which no liability attaches to State other than the proper care of profits, if any, derived from lands reclaimed under this act.

The Smith Commission made efforts to reclaim lands in four districts. None was reclaimed in Districts Nos. 1, 2 and 3; 14,000 acres has been reclaimed in No. 4 and it is expected that 19,000 acres additional will be reclaimed in this district. This land must be sold at \$15 per acre. For a detailed report about these Commissions reference is made to their Annual Reports, and to Reports of the State Examiner, to the Governor.

It is due both Commissions to explain that their task was two-fold and difficult. First engineering data had to be obtained as to feasibility and cost of reclaiming given lands, then some person or corporation able and willing to finance an irrigation enterprise must be found. To supply the engineering data there was not, as in several other states, a State Engineer, consequently much money and time was consumed in preliminary work before anything tangible could be presented to capitalists. The "promoting" was made difficult by market conditions. Many investors recalled the defaulting of California Irrigation District Bonds and were prejudiced against all irrigation investments; others being ignorant of the subject preferred investments they were familiar with.

WYOMING SUCCESSFUL.

It is notable though that Wyoming, under the Carey Act, has reclaimed 50,000 acres to date and has projects, now partially completed, which will reclaim 200,000 acres more. This land and the appurtenant water right has been sold to settlers at from \$7.50 to \$10.50 per acre. In 1901 over 4,000 people settled on lands thus reclaimed. That state is not going to lessen her efforts under the Carey Act because of the National Irrigation law.

Idaho has segregated 320,000 acres for various projects under the Carey Act. Inability to enlist capital has been her greatest obstacle.

CREDIT IS DUE TO THE MONTANA EXPERIMENT STATION.

Much of its work has been done in connection with U. S. Geological Survey and Office of Experiment Stations, but the investigations have been conducted almost wholly by Bozeman Station under Director Fortier. This covers duty of water, loss due to seepage, discharge of the principal rivers, etc.; it is fully reported in Annual Report of 1901, and Bulletin No. 29, issued by the Station and Bulletin No. 86 issued by the Department at Washington. From the determination of the duty of water of a few thousand acres in 1899, it increased to 16,000 acres in the Bitter Root, 12,000 in

the Gallatin and 15,000 in the Yellowstone the present season. Seepage loss on a dozen large canals has been ascertained. Without this knowledge it is impossible to distribute equitably the flow of any co-operative canal. The following streams have been measured by the U. S. Geological Survey under the direct supervision of Director Fortier's assistant, Mr. J. S. Baker:

West Gallatin River above Salesville.

Madison River near Red Bluff.

Jefferson River at Sappington.

Gallatin River at Logan.

Yellowstone River above Livingston.

Milk River at Havre.

Middle Creek above Flanders Mill.

Bitter Root above Grantsdale.

Big Blackfoot near Bonner.

Missoula River at Missoula.

St. Mary's River at Main.

Teton River near Brighton.

MONTANA'S IRRIGATION LAWS ARE BAD.

Measured by her agricultural possibilities Montana is the foremost state of the arid region. Greater area of reclaimable land, larger volume of available water supply, lower average altitude, a home market, extensive railroad facilities, favorable climatic and soil conditions, enterprising citizens,—all these factors ready to serve us,—yet we lag. Why?

Montana's irrigation laws are fundamentally wrong; they do not embody the best experience of other states and instead of promoting irrigation are a menace to it. Our fragmentary water right laws are the outgrowth of placer mining customs and were largely copied from California laws where the miner preceded the irrigator. Grave evils resulted in California from applying these laws to irrigation needs and the matter has been thoroughly investigated under direction of the U. S. Dept. of Agriculture, and reported in Bulletin 100, by Elwood Mead and others. As an example of how not to do it California's experience can be profitably studied by Montana. Mr. Mead (Bulletin 100) says: "There are few places in the world where rural life has the attractions or possibilities which go with the irrigated home in California, yet immigration is almost at a standstill and population in some of the farmed districts has decreased in the past ten years. It is certain that some potent but not natural cause is responsible for this and this cause

seems to be lack of certainty or stability in water rights which has given an added hazard to ditch building and been a prolific source of litigation and neighborhood ill-feeling. Farmers who desire to avoid courts and live on terms of peace with their neighbor, avoid districts where these conditions prevail." Referring to the speculative ownership of water and the hostility of water users to such control, Mr. Mead explains why there is stagnation by saying: "the farmer fears that if he adopts irrigation he will become the serf of the canal company. The capitalist hesitates about irrigation investments for fear of contests with other canals and the reprisals which hostile public sentiment will make possible."

THE SITUATION IN MONTANA.

These are a part only of the evils in California due to bad laws. What is the situation in Montana? At present it is extremely difficult to obtain clear indisputable title to water and neither adequate security to investors nor protection to the actual user is given. Appropriations for speculative purposes appear to be recognized by the Montana law. (See Sec. 1897 Pol. Code.) Nothing prevents over-appropriation and on many streams claims are recorded for from ten to forty times all the water therein, and the records of these claims are scattered in the various counties through which a stream runs. (Imagine a land system that allowed dozens of filings on the same land, thus jeopardizing prior rights and forcing claimants to continuous litigation.) As a result there are innumerable conflicting claims which cause expensive litigation and retard development; this evil is certain to be an overgrowing one if not remedied. Under existing conditions it is almost as easy to build a canal as to ascertain its rights to water. No law provides for

the prompt comprehensive determination of these conflicting claims. The District Courts have authority but the process is tedious, costly and unsatisfactory. Some states have a better method, one which adjudicates these controversies out of court and so protects all interests afterwards that few disputes arise.

In 1898 Elwood Mead, then State Engineer of Wyoming, acting under the U. S. Department of Agriculture, investigated the water rights on the Missouri River and its tributaries. His report was published in Bulletin No. 58. It deserves the attention of every citizen, especially the six pages devoted to Montana.

To show that overappropriations and indefinite claims threaten serious losses to water users, Mr. Mead cites the recorded rights to water from Trout Creek (Lewis and Clarke County) which has

a mean discharge of about 500 acre inches in the irrigation season.

Recorded Rights to Water from Trout Creek. (Lewis and Clarke County.)

Book.	Page.	Amount.
I	2	2,000 inches .
I	7	400 inches.
I	10	1,000 inches.
I	13	3,000 inches.
I	18	2,000 inches.
I	19	1,000 inches.
I	19	All the waters from a spring that empties into Trout Creek.
I	29	All the surplus water of Trout Creek.
I	28	Exclusive right to all the waters in Trout Creek.
I	29	Claims all the water of the upper part of Trout Creek.
I	29	2,000 inches.
I	39	All the water in Creek below ditch taking water to St. Louis bar.
I	42	500 inches.
I	43	All the water that can be "flown" in a ditch at any season of the year.
I	53	1,000 inches and all surplus water.
I	59	All the surplus water of Trout Creek.
I	68	All the water not then in use.
I	88	600 inches.
I	90	2,000 inches.
I	108	1,500 inches.
I	129	1,000 inches.
I	131	500 inches.
I	139	500 inches.
I	140	500 inches.
I	273	500 niches.
I	386	500 inches.
I	396	800 inches.
I	431	400 inches.
I	450	600 inches.

Upon the above Mr. Mead comments as follows: "If the first claim was a legitimate one it absorbed the stream four times over, and all the others are simply paper titles, injuring the first but have no value in themselves. Such is not the actual situation. Claim-

ants have used what they actually needed without regard to recorded statements.

The records given above do not include all of the claims to the stream, but as it did include thirty or forty times the entire supply, it did not seem necessary to pursue the inquiry any further. The records of scores of other streams were looked into with similar results. They lead to one of two conclusions: to recognize as vested a right to all that is claimed will establish appropriations for much more water than has been used, and will sooner or later compel all subsequent users to buy their supply from those whose right have no better foundation than the ignorance or greed with which they filled out their notices of claims."

OVER-APPROPRIATED STREAMS.

Director Fortier has given this some attention and informs us that while the water supply of Montana as a whole is not overappropriated, most of the smaller tributaries of rivers used for irrigation are already overappropriated, and submits the following list:

Tributaries of the Bitter Root.

Beaverhead River and Tributaries.

Tributaries of the Yellowstone in Gentile Valley above Livingston.

Tributaries of Shields River in Park County.

Tributaries of Clarke's Fork in Carbon County especially Rock Creek.

Many tributaries of the Yellowstone in Rosebud, Custer and Dawson.

Flint Creek in Granite County.

All of the Creeks in Gallatin County.

Middle Creek and West Gallatin River in Gallatin County.

Only an adjudication and division of these streams can determine if there is lack of water for all the present users or a surplus.

Obviously the menace of these overappropriations and conflicting claims can be removed only by their adjudication, and unless that is done irrigation and litigation will become synonymous.

AMOUNT OF WATER RIGHT LITIGATION IN MONTANA.

Although Montana has more water and less irrigated land than several sister states, the burden already imposed upon her taxpayers for court costs of water right litigation is considerable and increasing. Director Fortier is collecting data for Gallatin Valley on this subject which is to be published by the U S. Government.

He informs me that not more than one quarter of the rights in Gallatin Valey have been adjudicated, and yet the cost for this has been \$25,000. Of the 50 ditches taking water from the West Gallatin River, some of which convey water to hundreds of farms, not a single right has been determined. Not a farmer on these 50 ditches has a clear title to his water supply.

From inquiries addressed to each County I have ascertained the following: During the current year there has been water right litigation before the District Court in twenty counties, the number of cases in each ranging from one to fourteen. Such litigation is now pending in seventeen counties, in some of which are as many as ten cases. Water cases are reported as increasing by twelve counties. A case pending in Silver Bow has 66 defendants; one in Carbon has 400 defendants and involves all the water rights on Rock Creek. In Carbon a large portion of the Criminal cases and two-thirds of the civil cases are water and ditch controversies.

Many cases are tried without a jury and the costs thus kept at minimum, yet the total expenses paid out of the County Treasuries for the current year on account of water litigation has exceeded \$10,000. To this sum must be added the direct cost to litigants for witnesses, lawyers, etc., the annoyance and losses sustained, and the resulting discouragement of investors and irrigators. Altogether it is a heavy burden and a very serious obstacle to development.

NUMBER OF RECORDED WATER RIGHTS.

Data furnished me by the County Clerks shows there are 26,646 water rights now recorded in Montana. (For list by Counties see page 34.) Many of these have been abandoned, a very large number are indefinite, others have never been proved up, many more conflict with other claims. The first step necessary to bring order out of this chaos, to replace indefinite or uncertain titles with secure ones, is an adjudication of all recorded claims. Rights that have been abandoned should be cancelled; parties who from ignorance or greed claimed more than they use should be given what is needed for their land, no more. The streams should be measured to ascertain the quantity available at different periods, and the area of land irrigated determined. All this information is necessary to justly decide what are the rights of present users and as a guide to future enterprises.

IRRIGATION CODE NEEDED.

Montana will not occupy the position to which her natural ad-

vantages entitle her until we correct these mistakes of the past. There is urgent need for an irrigation code and administration of it that will produce "the greatest good to the greatest number." To accomplish that the Code should:

(1) Make the water of all natural streams, springs, lake, ponds or other sources within the State boundaries the property of the State, subject to all existing rights to the use thereof, and vest its control in the State.

(2) Permit this water to be obtained by companies or individuals or National Government for use upon compliance with provisions of the law.

(3) Prevent speculative filing on water hereafter and make void all such past findings, i. e. must restrict rights to a beneficial use of the water appropriated. (History* shows that where water has been made speculative property the stream owner levys excessive toll on the soil tiller, who suffers endless exaction and poverty. Those who merely file claims or file excessive claims so as to hold water out of use until they can compel a better citizen to pay them unearned tribute must be forever stopped.) Other states have done this and profited thereby.

(5) Give the individual or company acquiring water for irrigation or other purposes a clear and indisputable title to the use of such water.

(5) Protect the holders of these rights in the exercise of such rights by the assistance of a state department.

(6) Require disputes or complaints regarding the division or use of water to be referred to and settled by state officials charged with the administration of irrigation code.

(7) Prevent water waste and encourage its economical use.

WATER IS A STATE ASSET.

In Montana there are 65 million acres vacant land and water supply for only 11 million acres** hence water is absolutely certain to increase in value. The State, not speculators, should benefit by that increase. This can be effected by restricting each right to the place and kind of use which it was acquired and its cancellation when such use ceases, thus rigidly excluding speculative control

How shall this immensely valuable State asset be administered? The problem has been before other states and the recommendations

* Hall's Irrigation Development.

** See table on page 37.

herein are based on a careful investigation of their experience. Wyoming, Nebraska, and the Northwest Territory laws furnish by far the most satisfactory answer to this question. The Wyoming laws have been in force since 1894. The satisfactory working of those laws during such periods, under conditions similar to those in Montana, are evidence of their fitness for our needs.

It will help to a better understanding if a few very essential points are briefly considered. We ought to profit by the experience of others and that experience both abroad and in the United States shows the wisdom of State control. The water laws of southern Europe are the growth of centuries, during which period every form of control from exclusive state ownership to absolute private ownership has been tried. In an early period Italy sold water as an absolute property; she has since found it necessary to purchase back a large number of early grants and reassume control of the streams in order to foster agriculture.

The experience in Colorado, California, Wyoming, Nebraska, and other states, in Spain, India, Italy and Egypt, all prove that state control is best. Mr. Mead's conclusions after investigating California conditions are so pertinent that I quote "Litigation is as natural a product of the absence of public control as are weeds in a neglected field. There can be no stability under the present situation. The law affords no means of enforcing a right when adjudicated except through another lawsuit Irrigators can not live in peace. Litigation and controversies are forced upon them. To acquiesce in a new diversion, through sympathy, or for the sake of peace, may lay the foundation for an adverse right by prescription and end in the curtailment or the overthrow of all the rights of the peace lover. This uncertainty and the fear which grows out of it is the cause of much of the hostility with which appropriators regard new ditches and is the motive behind much of the extravagance and waste which sometimes prevails in the use of water. With a right clearly defined and protected, its owner has no fear of shortage in the time of need and he is willing, when his crops do not require water, to have it utilized by others. But when the right is insecure or not defined the instinct of self protection makes an Ishmaelite of every water user. His hand must be against every man as every man's hand is against him. The whole system is wrong. It is wrong in principle as well as faulty in procedure. It assumes that the establishment of titles to the snows on the mountains and the rains falling on the public lands and the waters col-

lected in the lakes and rivers, on the use of which the development of the State must in a great measure depend, is a private matter. It ignores public interests in a resource upon which the enduring prosperity of communities must rest."

WATER MUST NOT BE HELD APART FROM LAND.

This principle is so vital that I quote the following: "A recognition of the danger of allowing water to be monopolized without regard to the land has led a commission appointed to inquire into California irrigation to declare that, 'as a matter of public policy it is desirable that the land and water be joined never to be cut asunder; the farmer should enjoy in perpetuity the use of water necessary to the irrigation of their respective lands; that when the land is sold the right to water should also be sold with it, and that neither should be sold separately.'" (Australian Report on American Irrigation.)

"Italian experience, French experience, and Spanish experience all go to show that the interests to be studied in relation to irrigation schemes are so many and so various, and so intimately bound up with the public welfare, that State control is imperatively necessary, and that for the protection of its citizens no monopoly can be permitted which would separate property in water from property in the land to which it is applied." (Fourth Progress Report, Royal Commission on Water Supply, Victoria, Australia.)

"European experience shows—that where waters belonging to the State are farmed and relet by private individuals water rights are a constant source of gross injustice and endless litigation." (G. P. Marsh, formerly U. S. Minister to Italy.)

"The right to use of water should inhere in the land to be irrigated and water rights should go with land titles." (Land of the Arid Region., J. W. Powell.)

"The relative merits of laws which attach water appropriated to the land and those which like California (and Montana) make the canal owner the appropriator is not a matter of conjecture or theory. In countries where the control of water and ownership of land are separated controversies and abuses abound. There is no exception. The situation in Wyoming as contrasted with California shows that the arid west is not destined to furnish one." (Elwood Mead.)

ADJUDICATION OF RECORDED WATER RIGHTS.

There are over 26,000 recorded water rights in the state. These include abandoned, illegal, excessive, indefinite, and conflicting

claims. Our first task is the adjudication of these. It is pertinent to consider if this work should be done by the courts or a department of irrigation. The facts to be established are physical not legal; the acres irrigated, volume of water needed by those acres and the amount in a stream at different periods are to be determined; the most certain way is to go and measure the land and streams. Judges and juries can not do this. They must rely on conflicting, indefinite and interested testimony. As Mr. Mead observes "Court's have no reason to become specially informed concerning the irrigation problems along any stream, or to know the physical facts on which a just determination of these rights must in large measure depend." The result is, with due deference to the courts, their decrees are often absurd. For example, a Court decreed rights to 485 second feet of water out of Crow Creek (Wyoming) which seldom carries over 10 second feet and has but 5 second feet normal flow. This excess decree was not so remarkable as its division among claimants. One second foot will on an average furnish all the water needed for one hundred acres, yet the second appropriator by this decree got 6.92 second feet for one hundred acres or nearly seven times as much as he needed; the next got 23 second feet for 200 acres, fourth got 11.36 second feet for only 28 acres which is enough water to cover it 300 feet deep in a year. Another ditch watering a nine-acre tract was decreed enough to cover it 536 feet deep in a year. There are innumerable other decrees as wasteful.

A most serious defect in the settlement of water controversies by litigation is that court decisions are seldom final. Usually suit is brought against a neighboring appropriator only although there may be scores of other appropriators fifty or one hundred miles away who are equally responsible for the shortage. The court determines only the relative rights of the parties to this suit and other suits are instituted; thus a continuous warfare goes on. A Utah incident is cited by Mr. Mead, viz: "In 1890 a number of irrigators on Spanish Fork River, brought suit to quiet title to its water. Two years later the decision establishing their right was entered on record. In 1893 other irrigators on the same stream brought suit to have the title to its water again quieted. This lasted five years. In ten years the titles have been quieted four times and another lawsuit to again settle has just been instituted. Whether the water rights or the litigants will first be put to rest is yet uncertain."

Such is the situation as to court decrees where the trial is of genu-

ine rights. It has happened that suits have been brought for the sole purpose of acquiring control of a stream in accordance with a division agreed upon before hand. Certain appropriators agree among themselves as to the amount they will claim and each secures a decree for that amount. It is extravagant decrees thus obtained that are a serious menace to rights of users on many streams. In Colorado when the holders of these excessive rights began to make use of them for speculative purposes the farmers awoke to their danger. The recognition of these dangers was not limited to farmers. Judge Victor A. Elliot of Colorado, said, "Excess decrees are a crying evil in this state. From every quarter the demand for their correction is strong and loud. Such crying demand can not be silenced by declaring that the meaning and effect of such decrees can never be inquired into, construed or corrected after four years. In many cases such decrees are so uncertain, so ambiguous, so inequitable, so unjust, and their continuance is such a hardship that litigated cases will be continually pressed upon the attention of the courts until such controversies are heard and settled, and settled right. Litigation in a free country can never end while wrongs are unrighted."

Hon. Platt Rogers of Colorado, referring to this subject said, "decreed appropriations are now being bought, not merely to utilize the volume heretofore diverted and used, but to obtain the advantage of the amount decreed for speculative purposes." This evil is more apparent in Colorado because irrigation has there made greatest advances. As other states develop they will show equally serious abuses unless a better method of adjudication is provided.

RECORDED WATER RIGHTS IN MONTANA ARE INSECURE.

Old water rights will be insecure so long as the right to make new appropriations is unrestricted; hence to afford prior users security there must be some official charged with supervision and power to limit diversion. Neither in California or Montana is there any law limiting appropriations. Mr. Mead's comments on California apply as well to Montana; he says, "what was done in effect was to throw open the record books of every county in the state to the entry of any sort of a claim against its most valued property which need or greed might encourage." Those making a beneficial use of water are entitled to protection, but under existing conditions in Montana a water user has absolutely no protection. There may be no surplus water in a stream but nothing prevents the diversion

by a late comer, farther up stream, of water need by a prior appropriator. It is true the injured party can go to court and, in time, get a decree, but he should not be subject to such expense and trouble. And even after he obtains a decree, how is he to enforce it? Spend more time and money going for an officer or follow the example of the Californian, who replying to the inquiry of how he obtained his share of water, said, "he first got a court decree and then shipped in two men handy with a gun."

WASTED WATER.

The more water wasted the less land irrigated; hence the State is vitally interested in prevention of waste. The "duty of water" varies and therefore should not be fixed by statute, but a minimum should be established. In Wyoming, Nebraska and Colorado, waste is to a large extent prevented by the tact and good judgment of officials who administer the law. An adequate presentation of this phase of irrigation would require a volume. It has had considerable attention by Director Fortier the results of whose investigations have been published in the Bulletin before named.

OBSTACLES TO IRRIGATION INVESTMENT.

We have spent, and will continue to spend, money generously to advertise Montana; we make strenuous efforts to enlist capital, especially for mining, but we neglect to remove the serious obstacles to irrigation investments. Consider the difficulties confronting a promoter or an investor who undertakes an irrigation enterprise in Montana.

First, the quantity of water in a stream is usually unknown with any certainty. On most streams a quest for accurate data elicits only a statement from the "oldest inhabitant" of how many times it has been necessary for stock to swim the stream; unfortunately drouth and low water not making so vivid an impression are forgotten and well meant but misleading information is given. Few streams have been measured so that the supply at different period is definitely known.

Second, records of water rights are scattered in all the different counties through which a stream runs, and as prior to 1895 many counties did not separately index water rights, they must be searched for among placer claims, ranches, etc. This often necessitates hunting through records in from two to seven counties a hundred miles or more apart.

Third, very many streams are overappropriated, ten, twenty,

forty times according to the recorded claims; water may run to waste in some of these but until all the recorded rights are adjudicated the investor is a target for litigation.

Fourth, many claims have been passed on by the courts but as there is no stream record of cases it is necessary, in order to ascertain what has been settled by judicial decree, to examine the entire trial record of District Court. Mr. Mead made an effort to trace down water right litigation on a few of our streams, and found that Court Clerks, attorneys and irrigators were often as much in the dark regarding the real status as an outsider and concluded that a continuance of this lack of system for another twenty-five years would cause a confusion impossible to clear up.

Fifth, there is no adequate means of protecting rightful owners. The effect of all these obstacles is to appall careful investors who often quit a contemplated enterprise in disgust.

REMEDY APPLIED TO THESE EVILS BY OTHER STATES.

Wyoming and Nebraska have found an effective remedy for the irrigation evils that retard Montana; that remedy is a rational irrigation code and a department for determination and protection of existing rights and control of all water. There is the same need for an irrigation department that there is for National and State Land Departments. The experience of California, Wyoming, Nebraska, and other states prove it. Eminent members of the bar have been convinced of the need and made eloquent pleas for it. Vide "Works on Irrigation" by John D. Works, Ex-Justice of California Supreme Court. Expert Investigators of the National Government as Elwood Mead and others have urged its benefits. (Bulletins 98 and 100.) Recently a Commission in California reported in favor of such a department for that state and submitted a proposed law for the action of 1903 Legislature. On that Commission served Ex-Justice Works and two other members of the Bar, President Wheeler* of California University, President Jordan of Stanford University, F H. Newell of the U . S. Geological Survey, Elwood Mead and other eminent engineers.

Wyoming enacted a code in 1890 when admitted as a State. Since then her Board of Control has adjudicated 3,912 water right claims acquired under territorial laws. There has been only five appeals from the Board to the District Court and three from District to Supreme Court. Water litigation practically ceased,

streams have been measured, overappropriation and waste prevented, and protection afforded. Lands donated to the State by the Government, under the Carey Act, have been reclaimed in far greater amount than by any other state.

Nebraska enacted an irrigation code in 1895, copied largely from Wyoming, at that time her condition was similar to that now existing in Montana. Since then 1,014 water rights, acquired prior to 1895, have been adjudicated by her Irrigation Board, and less than a dozen appeals were taken from the Board to the District Court. Water users have had protection, litigation over water rights practically ceased and irrigation development progressed. Although only part of Nebraska is arid, water has been appropriated for about 1,500,000 acres. Investments in irrigating ditches have been over \$5,000,000. To this must be added increase in value of irrigated lands due to ditches \$15,000,000, and increase in value of grazing lands contiguous to irrigated districts, several millions more.

Colorado laws are not as good as Wyoming's, but she has an excellent Engineer's Department and since 1890 has added 720,526 acres of irrigated area, most of which was public domain comparatively valueless, but now at a low valuation worth \$29,000,000. All this has been done without national aid.

AREA ASSESSED AND VALUE OF DITCHES.

It is notable that less than 10 per cent of Montana's area is assessable and that over 90 per cent or more than 84,000,000 acres bears no part of State or County taxation. Equally noteworthy is the fact that according to the 1900 U. S. Census there had been invested in irrigation ditches in Montana to 1899, \$4,966,000. The Census figures underestimate. In the Gallatin Valley the Census gives the cost of construction of canals and ditches at \$446,369 and the number at 114. The facts are that four of the largest canals cost about as much as the sum named, and instead of 114 canals there are over 200.

How much is all this property in the State assessed for? The returns made to the State Board of Equalization show that Mining and Irrigation ditches total assessment in 1891 was \$225,000 which soon increased to about \$500,000 remained at that for four years and then declined about one-half. In 1902 the irrigating ditches alone were returned at \$276,000 for the entire state. Here is a discrepancy of over \$4,500,000 between the under stated Census and the assessment. It is an important question how much of this difference is depreciation, how much failure to assess canals that are

mere carriers of water for profit which should be taxed as such, and how much may be individual or co-operative canals. As these last are the property of land owners whose land thus reclaimed is presumed to be assessed much higher than when arid it does not seem just to tax such ditches provided the land under them is properly assessed. The discrepancy seems too great, however, and the wisdom of hereafter according to irrigation investments the protection and aid which the State extends to other interests and, for that, exacting more accurate assessment is respectfully suggested.

LEGISLATION.

The duty of framing and enacting laws for the State rests with the Legislature and I have no desire to encroach upon it, but realizing that a multitude of matters will demand Legislative attention I have prepared for its deliberation a carefully considered bill. In this work valuable aid has been rendered by Ass't Att'y Gen. Mettler, Director Fortier, Mr. E. C. Kinney, and Mr. Elwood Mead.

The proposed law embodies mostly the Wyoming laws, the irrigation law recently recommended by the California Commission, and some provisions from the Northwest Territories code. As the Wyoming law has been in successful use twelve years, and the Nebraska law, which is similar, seven years, and the Northwest Territories law eight years, the proposed law, submitted herewith, is not an experiment; its fitness has been amply proven.

It is the general purpose of the bill to foster every legitimate effort to increase the irrigated area, to confine appropriations to beneficial uses, check wastefulness, guard the rights of the National Government and of the State, of individuals and corporations, ascertain and record those rights and create a Board to administer the law.

The Federal and State Governments each have interests in the arid lands within the State, each have work to do in connection therewith that the other can not perform; there is no necessity for conflict of authority, there need be no friction between them, and the proposed law makes easy their effective co-operation for the common good. The National Irrigation law provides for the construction of reservoirs for storage and distribution of flood waters; as it is for the best interest of the State that all efforts of the Federal Government to preserve water that otherwise goes to waste should be encouraged, a statute to that end is included. The enactment of the proposed code will put Montana in right relation to the National Government since it provides a proven remedy for the

evils pointed out by President Roosevelt, by Secretary Wilson, and by Elwood Mead, Chief of Irrigation Investigations.

There are two proposed bills, one was framed to amend State Arid Land Grant Commission law. Reclamation of arid land under the Carey Act is only part of the general irrigation work of the State and should be included in the duties of the Irrigation Board so far as practicable. Seven years trial has shown defects in the Arid Land Grant Commission law, and the work which it intends that Commission to do can, I believe, be more effectually and cheaply done under the proposed law. The cost of salaries, travelling expenses of the Commission from April, 1897, to Nov. 30, 1899, exceeded \$15,500. The engineering expenses for that period were \$16,500. While only part has been paid out of the State Treasury, it all added to the cost which settler must pay for land thus reclaimed. Much of this can be saved.

BENEFITS OF IRRIGATION CODE.

Existing legal conditions in Montana are very unfavorable, outside the St. Mary's project, to securing our share of National aid; this serious obstacle will be removed if the proposed bill becomes law, and the \$5,000,000 now invested in irrigation ditches would be protected instead of subjected to endless hazard and harassment of litigation.

Those who are now making a beneficial use of water would have their rights defined and secured against encroachment.

Titles to water would become as stable, clearly defined and easily ascertained as land patents.

Overappropriations would stop, water litigation almost cease, information necessary for investors be easily obtainable; the protection and aid afforded would lead to irrigation investments, these would increase taxable wealth and homes and indirectly promote other industries.

The \$5,500,000 now annually drained from our pockets for imported farm produce would instead remain and circulate in the State.

The laborer would have two new opportunities, one for work in construction of canals and reservoirs, the other to obtain a home and the independence of farm life.

Capital would have opened for it a safe and profitable investment field.

The foregoing appeals mostly to self interest and State pride, there is another aspect of the matter—the humane; every measure which

creates opportunities for home making, that opens new avenues for the overcrowded and overworked, that weds manless land to landless man, is a power for good, makes for national well-being, and is therefore worthy of support.

If the law is enacted these benefits will begin at once; to attain their full measure will require time; how long depends on the funds made available for this work and the ability and energy of the men appointed. The officials must combine professional knowledge with tact and executive talent; such men render valuable service, should be paid accordingly and when found retained. Their tenure of office should depend on their efficiency and not on party success.

THE COST.

The cost entailed by the proposed irrigation code will not be an additional burden on taxpayers, it involves only a wiser expenditure of sums now largely wasted, it will be a saving. The salaries of the Arid Land Commission when active are \$4,500 annually, office and travelling expenses extra; the amount paid out of County Treasuries the current year for costs of water right litigation exceeded \$10,000, such litigation is increasing. The cost to litigants the current year can not be accurately ascertained but estimated on the cost to counties probably exceeded \$20,000. These items will total \$35,000; for all this the taxpayers receive slight returns. It is largely waste that would cease under wise laws and a capable irrigation department. Less than one-half the above total will pay all the expenses of such a department.

Some of the benefits will be immediate and direct to irrigators, a portion will be diffused among the general public, so it seems equitable that the expenses be so borne. For that reason the law provides that fees be charged irrigators for some of the services rendered them by the department. Besides, when irrigation interests reserves better production there should be a large increase in assessed valuation of existing canals or the lands reclaimed by them: these two sources of revenue would meet the largest part of the expense. The part left to be paid by the general public would be much less than the annual court expense of water cases now borne by taxpayers in twenty counties, and would probably soon cease by reason of new irrigation enterprises increasing taxable wealth.

Attached is some tabulated data. The proposed law is in two parts, which follow, marked, "State Irrigation Board Law," page 38, and "Carey Land Act Board Law," page 84.

MR. MAXWELL'S LETTER OF ADVICE.

Since the foregoing was written a letter from Mr. Geo. H. Maxwell to Senator Paris Gibson, in which Mr. Maxwell advanced arguments (?) against the remedy proposed in this report, has been given much publicity.

That the public may better judge the merits of these opposing views the following is submitted.

Mr. Maxwell is entitled to some credit for efforts to promote National Irrigation, and he is in accord with other workers in asserting that the right to use of water should vest in the user, become appurtenant to the land irrigated, and that the beneficial use shall be the basis, the measure and the limit of such rights. But it is true that most of his other views are not supported in California, his home, and are strongly opposed by eminent irrigationists elsewhere.

Montana is, in legal matters, similar to California, our laws having been largely copied from her's; our irrigation evils are similar to California's. The remedy selected for those evils in California by the State Commission, should be good for Montana. On that Commission served Ex-Justice Works of the California Supreme Court, who has made a special study of the legal aspects of the subject; is it not safe to assume that Ex-Justice Works is better legal authority than Mr. Maxwell on this matter?

Mr. Maxwell paints a rosy picture of what the National Government can do for us "unless the people of Montana should be so unwise as to adopt the Mead theory of the State ownership and State control of the distribution of all the water of the State."

Mr. Mead is the Chief of Irrigation Investigations for the National Government, made such because of his experience and ability. Formerly Mr. Maxwell repeatedly commended the work of the Department of Irrigation Investigation. In the National Advocate of October, 1900, Mr. Maxwell wrote as follows: "The excellent work which Elwood Mead of the Department of Agriculture, and his assistants are doing throughout the West along irrigation lines, is becoming well known. As State Engineer of Wyoming Mr. Mead achieved for his State such an enviable reputation in the irrigated region that his broader work of investigation under the General Government is meeting with such favor and is being watched with deep interest. His first annual report on "Irrigation Investigation" is just issued and will be found of great value to the West." Mr. Mead's work has not changed, he advocates now precisely what Mr. Maxwell praised in 1900.

Why has Mr. Maxwell changed? What is the real influence that controls his action? Those who wish to know will be enlightened by the "Irrigation Age" for November, 1902, which contains an editorial from the Denver Republican, October 10th, and an open letter from Mr. Mead to Delegates of the National Irrigation Congress, dated October 15th.

MR. MAXWELL NOT A GOVERNMENT OFFICIAL.

Mr. Maxwell does not represent the National Government in any capacity, he is not a State official. He is Executive Chairman of the National Irrigation Association, and advocates "an entirely different plan" from the one he unfairly designates as Mr. Mead's "theory."

Inasmuch as Montana will have to do business, not with Mr. Maxwell, but with the National Government is it not wiser to shape our State policy in harmony with the views of the Government as expressed by Secretary Wilson, and Mr. Mead, Chief of Irrigation Investigation, instead of an opposition to them?

The pretended purpose of Mr. Maxwell's four column letter is to prevent a conflict between State officials and National Government. Note Mr. Maxwell's inconsistency. He advises no action for two years and none then unless it accord with the views of Mr. Maxwell, because possible complications and lack of harmony with the Government might result. But what is Mr. Maxwell doing? He is ignoring Secretary Wilson's Report for 1901, ignoring the special reports issued by the Agricultural Department, and opposing the recommendations made by Mr. Mead, the Government Expert. Is not Mr. Maxwell "agin the Government?" Is not his article a specious appeal for Montanians not to oppose Mr. Maxwell, instead of, as pretended, a plea for concerted action with Uncle Sam?

NO COMPLICATIONS WITH GOVERNMENT WILL RESULT.

To show that Mr. Maxwell's painful solicitude lest Montana or California "hamper the operations of the National Government" is uncalled for I quote Section 40 of the proposed California law, which is Section 5 of the proposed Montana law. As said section was published in October supplement to Water & Forest, Mr. Maxwell should be cognizant of it. If he was informed why did he not enlighten us with it; if he does not keep informed is he qualified to advise?

Section 5. Subject to Laws of Congress for Storing Water.

All rights to water flowing over, on or across government land of the U. S., and all flood waters acquired under this act or previous laws of the State, shall be subject to any acts of the Congress of the United States, providing for the storage, conservation and distribution of the flood or other unappropriated water of such streams for public use, and the Government of the United States may, in the interest of the public good, acquire right and title to all or any part of the waters of any of the streams of the State in furtherance of any such enactment of Congress, by paying to any owner of water rights reasonable and just compensation therefore, to be arrived at by agreement of the parties, if possible; if not, by condemnation proceedings, as provided by law.

MR. MAXWELL'S REMEDY.

In a recent address Mr. Maxwell says: "There are things the State ought to do, but those things are not the adoption of complicated code of water laws. The States should establish a few simple fundamental principles by constitutional amendment and judicial decision." Is not Mr. Maxwell a little mixed? If a constitutional amendment be adopted what is the necessity for a Supreme Court decision, saying such is the law? Concede a constitutional amendment is desirable, would it and a "few simple principles" be an adequate remedy for existing evils in Montana? If so how long before the "few simple principles" would adjudicate the 26,000 claims now recorded?

In his letter to Senator Gibson, Mr. Maxwell devotes much space to the bugaboo of a possible clash between State and Nation, but very little to a consideration of the evils that President Roosevelt, Secretary Wilson and Mr. Mead pointed out. In a sentence which I do not quote because it contains three hundred words he conjures up. "A vista of troubles piled upon troubles" arising from complications of State with Nation. Has his zeal overstimulated his imagination?

He seeks to create a fear as to complication. The purpose of a State law is to end complication.

It is significant that of the nine projects already recommended to the Department of the Interior under the National Irrigation Act, six are located in states having a State Administration of streams. Wyoming gets two, Colorado two and Nevada two. Nevada has a county supervision based on the Wyoming law.

HYDROGRAPHIC BASINS.

Mr. Maxwell concurs in a division of the State into hydrographic or drainage basins, which is the method in Wyoming and Nebraska and proposed for Montana, but he objects to State control and proposes instead that each drainage basin take its troubles to the National Government for settlement. Such a procedure is impracticable; it would advertise our defects and disgust the East.

The hydrographic basins in Montana cover great area, the Missouri or Yellowstone or Milk River basins are hundreds of miles in length. How easy it would be for all the irrigators in each of these great basins to get together in a town meeting, and despite all their conflicting interests, agree upon an organization, then send a representative to Washington! Suppose this was done how long would Congress or any other Department listen to the troubles of each drainage basin? Would or could it bring order out of the confusion of the 26,646 recorded claims in Montana? If Mr. Maxwell's method was adopted in all the sixteen states and territories there would be from 60 to 75 drainage basins for attention at Washington. Would the Government devote its time to this business to the exclusion of all other? If not how rapidly could the disputes be settled and who would be the last served? Is the method simple or expeditious or practicable?

Mr. Maxwell designates the State control advocated by Mr. Mead and others as a "theory." Why is he not fair enough to say State control has been in operation in Wyoming twelve years, in Nebraska seven years, with great satisfaction to Irrigators and that State control has been recommended by the California Commission.

POLITICAL PATRONAGE.

Mr. Maxwell imagines much harm from the political patronage incident to a State Board, and speaks of "Corps of ditch tenders" and "corps of political appointees" as dangers. This is a bugaboo. The Wyoming law and the proposed Montana law provides for a State Engineer and a Superintendent for each of the four hydrographic basins, a total of just five persons; it further provides that when necessity therefor shall arise water districts may be formed which shall be so constituted as to secure the best protection to claimants for water and most economical supervision on part of State, and for the appointment of a water commissioner in the district, who shall not begin work until called upon by two or more owners or managers of ditches by an application in writing

and shall not continue performing services after the necessity therefor ceases. These Water Commissioners accounts are audited and paid by the County Commissioners.

Is there great danger in the foregoing? Is there more danger when such appointments are made by State authority instead of National Government, or less? Is the State Government less competent or trustworthy than the National Government? In event an appointee proved unfit, could and would removal be quickest from Washington or Helena?

WAIT TWO YEARS.

Mr. Maxwell is extremely solicitous that no legislation be enacted for two years, he fears our people cannot in less time determine their needs. Mr. Maxwell has spent very little time in Montana and his lack of knowledge of the people and conditions is pardonable. After a residence of thirteen years I am confident Montanians have both ability and energy to discuss this subject and arrive at wise conclusions in two months.

MILLIONS TO BE EXPENDED.

He speaks, in the letter to Senator Gibson, of the "millions upon millions that will be expended." He is more accurate in an article in November "Forestry and Irrigation" so I quote, "In the next two years there will be about \$10,000,000 available. This fund is as much as can be wisely expended in the next two or three years." Now as this fund is divisible among sixteen states and territories Montana's portion would be only \$625,000.

GALLATIN VALLEY.

Mr. Maxwell is to be commended for recognizing one need correctly, though his suggestion for relief is bad. He says: "I do not question that in some of the oldest settled sections of the state, where the water supplies are over appropriated, as in the Gallatin Valley, with resulting litigation, that evils exist which can and should be remedied as soon as possible. But it is quite possible, too, that in such a case hasty action might create conditions under which the cure might be worse than the disease."

Here is his suggestion for Quick Relief.

"I think it is an open question whether it may not be possible to get relief quicker for such sections as the Gallatin Valley by uniting all the conflicting claims to water in a voluntary water users' association such as is now being done in Salt River Valley Arizona, to the end that they may, without the necessity of any

state legislative action whatever, form a co-operative association, through which they could deal as a unit with the National Government and to get it to build without delay the storage work necessary to conserve the flood waters that now run to waste in the Gallatin River and stop litigation by providing water enough for the use of all irrigators in that hydrographic basin, treating the Gallatin Valley as a single natural forestry and irrigation district, from the crest of the mountains forming its water shed on every side clear to the mouth of the river."

Grant, what is highly improbable, viz: that the numerous contending water users did unite in an association, would the National Government deal with them as a unit? Would it build without delay storage works in the Gallatin? Would not the Secretary of Interior say "the department has available only a limited sum for such work and already has under consideration in Montana the St. Mary's project which will cost at least more than twice Montana's share of the appropriation. The Government through Mr. Mead (Bulletin 58) called Montana's attention in 1898 to her bad laws of which you are victims. In 1901 Secretary Wilson pointed out that "For the Government to provide an additional supply on these streams before existing controversies are settled would simply intensify the evils of the present situation. Whatever aid Congress extends should be conditioned on the enactment of proper irrigation codes by the States." This department considers the foregoing should be acted on. Why has Montana failed to? Your quickest and best course is to enact a proper irrigation code adjudicate your claims and provide for future protection. The St. Mary's Lake project being free from water right complication the Government will not consider a diversion of funds from that project to the Gallatin or any other valley where streams are over-appropriated."

In the State of Montana are 688,000 acres of land granted to the State Institution, and 2,341,000 acres of school lands; the value of those lands is effected by laws relating to water. Should not the State guard that interest in preference to being influenced by Mr. Maxwell's theory?

Director Fortier of the Montana Experiment Station has had as an engineer, many years irrigation experience, part of which has been spent investigating conditions in Montana. He is strongly opposed to Mr. Maxwell's views. Mr. E. C. Kinney who manages the West Gallatin Irrigation Co., a property of over 4,000 acres

that produced this year over \$100,000, is also very much opposed to Mr. Maxwell's theory.

Secretary Wilson of the Agricultural Department, in his Report for 1902, referring to use of Western rivers for irrigation, says: "— the establishment of titles to these streams by methods which shall prevent speculative appropriation of water and the creation of water monopolies is one of the imperative needs of the immediate future." Mr. Maxwell puts much emphasis on doing nothing for two years and the establishment not of titles, but a "few simple principles."

Elwood Mead, the Government expert believes "Mr. Maxwell's present activities are altogether selfish and that they threaten the workings of a beneficent measure."

Mr. Maxwell has no support in his own home, or elsewhere that I am aware of. Is Mr. Maxwell alone right? Are all the foregoing wrong? Has Mr. Maxwell's zeal eclipsed his judgment?

Mr. Maxwell's attitude is antagonistic to the Government. We want Government aid, should we oppose the Government because Mr. Maxwell wants us to?

Mr. Maxwell cites the Salt River Valley Association as an example for Montana irrigators. I am reliably informed that Association has found it necessary or desirable to employ an attorney who is an ardent advocate of Mr. Maxwell's theory. Presumably said attorney is to use his persuasive powers with the National Government, and to adjust, or try to, the conflicting interests of Salt River Irrigators, at their expense.

This suggests a new, very lucrative, and as yet unexploited field for the operation of shrewd gentlemen with some legal knowledge and irrigation prestige. Water rights and unappropriated water in more than a dozen states worth millions upon millions of dollars: for this liquid wealth there are thousands and thousands of conflicting claims. What an opportunity would be created for greedy claim agents if all this could be, by an arrangement with the National Government, managed on the lines desired by Mr. Maxwell.

Since Congress could not deal with the thousands of vexing questions incident to Mr. Maxwell's method, if the National Government attempted to adjust the conflicting interest, which is improbable, it would result in the formation of an elaborate and expensive department for that purpose, with much red tape; then the individual irrigator or an association would find it necessary to do business with the Government through an Attorney at so many

dollars per claim. Would not the water user "get off" at the door of a water claim agent in Washington? How many dollars and how much time would he lose in securing his rights,—if he ever obtained them. How much would such a department cost? Would the East submit to the expense for our benefit and that of claim agents? If a stream does not now supply water for all irrigators could anyone in his capacity as attorney furnish it?

Under the Wyoming and proposed Montana law the adjudication of existing rights is done at the least possible expense and annoyance to the user. The means of adjudication are brought to him, he needs no attorney and pays only a small fee. Simplicity, expedition and justice are far easier attained under the State law.

Respectfully submitted,

F. H. RAY.

Ass't State Examiner.

WATER RIGHT CLAIMS.

Recorded in Counties as reported by County Clerks November, 1902.

COUNTY	No. of Claims	Remarks
Beaverhead	1,050	Since 1895 only.
Broadwater	580	
Carbon	675	
Cascade	1,445	Since 1889.
Choteau	1,538	Since July 1895.
Custer	423	Since Aug. 28th, 1895.
Dawson	500	
Deer Lodge	2,000	Does not include claims prior to 1885; does include all of Powell County and part of Granite.
Fergus	1,600	
Flathead	516	
Gallatin	3,000	From 1865 to 1902.
Granite	700	Mostly placer; the same water has been abandoned repeatedly and relocated later so that actual number at present is probably one-third of 700.
Jefferson	1,103	From 1885 to date.
Lewis and Clarke	1,740	
Madison	1,665	
Meagher	434	Since 1894.
Missoula	1,642	This Includes Flathead and Ravalli up to 1893.
Park	1,515	This left after deducting 500 for Sweet Grass.
Powell	132	Since 1901, does not include prior to 1901 as those are reported in Deer Lodge.
Ravalli	910	
Rosebud	230	After deducting 43 for Custer.
Sweet Grass	520	1880 to 1902.
Silver Bow	1,100	
Teton	568	From July, 1895, does not include from March, 1893, or old Choteau County records.
Valley	484	From April 30, 1892.
Yellowstone	586	From 1880.
	26,646	

AGRICULTURAL PRODUCTES IMPORTED IN MONTANA DURING THE YEAR 1901.

Mr. C. H. Edwards, Secretary of the Montana Board of Horticulture compiled, by an examination of thousands of freight bills, the weights of agricultural products shipped into Montana during 1901; the total weight is 75,569,997 lbs. The detailed table will be found in the Report of Montana Bureau of Agriculture, Labor and Industry for 1902.

Mr. Edwards puts the total value of these imports at \$6,500,000. No fruits are included in the above.

In arriving at the value of imports that could be produced in Montana I have excluded from Mr. Edwards' tables a considerable portion of the vegetables that are shipped in because they supply

our market during months when, for climatic reasons, Montana could not. Grass seeds are omitted because informed that it is more profitable to feed alfalfa, etc., and ship in the seed than to impair the nutritive value of grasses by letting them mature for seed purposes. The prices used were obtained from wholesalers and are an average of rates paid by them in 1901, not the retail prices. From the total weights reported by Mr. Edwards deduction for tare has been made when necessary for accuracy.

MEATS.

	Lbs.	Price	Total	
Ham	7,222,021	12½	\$902,753	
Bacon	3,617,177	12	434,061	
Lard, net	1,800,620	11	198,061	
Fresh Pork	2,597,577	7½	194,818	
Cured Meats	552,467	11½	63,533	
Fresh Meats	3,139,421	13½	423,821	
Poultry	3,024,837	14	423,477	
Eggs, Dozen	4,056,360	17	.....
Eggs .....	.....	.....	.....	\$2,640,531
				\$689,601

DAIRY PRODUCTS.

	Lbs.	Price	Total	
Butter, net	3,915,861	23½	\$920,227	
Cheese, net	699,771	14	97,968	
Condensed Milk, dozens	60,000	1.06	63,600	
			.....	\$1,091,795

VEGETABLES.

	Lbs.	Price	Total	
Onions	1,475,609	1.60	\$23,609	
Potatoes	10,374,387	1.30	134,867	
Horseradish	4,430	3.25	143	
Dried Peas	24,024	3.50	840	
Dried Beans	1,189,650	4.25	50,560	
			.....	\$210,019

GRAIN.

	Lbs.	Price	Total	
Oats	332,340	1.15	\$3,821	
Wheat	18,239,150	1.10	200,630	
			.....	203,630

MISCELLANEOUS.

	Lbs.	Price	Total	
Mixed Pickles	1,429,878	5	\$71,493	
Cucumbers are raised in Montana but are sometimes destroyed by early frosts. The price above used is for the lowest grade, that part which is higher is assumed to be offset by tare.				
Oleomargarine and Butterine	700,065	17½	\$122,511	\$194,004
				\$5,019,580

TOTAL FOR 1902.

Total for 1901	\$5,019,580
Fruit that could be supplied, estimated.....	\$200,000
Meats are on average higher than in 1901.....	281,804
If that be added and assume that the quantities of all articles were equal to 1901, the total below would give the value of 1902 importations	\$5,501,384

AREA IRRIGATED.

State or Territory.	1890	1900
Arizona	70,000	190,000
California	1,200,000	1,500,000
Colorado	1,000,000	1,400,000
Idaho	230,000	600,000
MONTANA	380,000	1,000,000
Nevada	240,000	510,000
New Mexico	95,000	200,000
Oregon	180,000	400,000
Utah	300,000	650,000
Washington	100,000	150,000
Wyoming	250,000	600,000
Subhumid	70,000	100,000
Total....	4,115,000	7,300,000

(Table from "Irrigation in the United States" by Frederick H. Newell.)

GRAZING, WOODLAND, FOREST, DESERT AND IRRIGATION LAND AND
EXTENT OF WATER SUPPLY, IN WESTERN PUBLIC LAND STATES
IN MILLIONS OF ACRES.

STATES AND TERRITORIES	Land Surface.	Grazing.....	Woodland ...	Forest	Desert	Improved.....	Irrigated.....	Water Supply.
Arizona	72	38	9	10	15	0.2	2.2	2
California	99	20	26	18	20	1.5	1.5	17
Colorado	66	40	14	10	.....	2	1.2	8
Idaho	54	20	19	14	.....	1	0.5	5
MONTANA	93	56	15	21	.....	1	0.8	11
Nebraska	49	25	2	.....	.....	22	.....	2
Nevada	70	42	6	.....	.....	1	0.5	2
New Mexico	78	57	16	4	.....	0.5	0.2	4
North Dakota	45	38	1	.....	.....	6	.....	2
Oregon	60	18	17	20	.....	5	0.3	3
South Dakota	49	38	1	.....	.....	10	.....	2
Utah	52	18	14	8	10	2	0.5	4
Washington	43	9	9	23	.....	2	0.1	3
Wyoming	62	39	10	7	5	1	0.5	9

(This table is taken from "Irrigation in the United States," by Frederick H. Newell.)

VACANT AND RESERVED AREAS IN THE WESTERN PUBLIC LAND
STATES.

	Total Area Acres	Vacant Acres	Per Cent	Reserved Acres
Arizona	72,268,800	48,771,000	67.5	18,285,000
California	99,827,200	42,049,000	42.1	16,064,000
Colorado	66,332,800	39,116,000	59.0	5,694,000
Idaho	53,945,600	42,475,000	78.7	1,747,000
Kansas	52,288,000	1,085,000	2.1	988,000
MONTANA	92,998,400	65,803,000	70.8	12,348,000
Nebraska	49,177,600	9,927,000	20.2	70,000
Nevada	70,233,600	61,322,000	87.3	5,983,000
New Mexico	78,374,400	55,589,000	70.9	6,385,000
North Dakota	44,924,800	16,956,000	37.7	3,370,000
Oklahoma	24,851,200	4,654,000	18.7	7,158,000
Oregon	60,518,400	33,784,000	55.8	5,500,000
South Dakota	49,184,000	11,869,000	24.1	12,803,000
Utah	52,601,600	42,516,000	80.8	5,486,000
Washington	42,803,200	11,913,000	27.8	10,715,000
Wyoming	62,448,000	47,657,000	76.3	7,995,000
Total.....	972,777,600	553,486,000	55.1	120,643,000

(This table is taken from "Irrigation the United States," by F. H. Newell, of the U. S. Geological Survey.

WATER RIGHT LAWS.

Present Constitutional Provision.

The use of all water now appropriated or that may be hereafter appropriated for sale, rental, distribution, or other beneficial use, and the right of way over the lands of others for all ditches, drains, flumes, canals, and aqueducts, necessarily used in connection therewith, as well as the sites for reservoirs necessary for collecting and storing the same, shall be held to be a public use.

Art. III, Sec. 15.

PROPOSED WATER RIGHT AND IRRIGATION CODE.

An act to declare the ownership of and provide for and regulate the diversion, distribution and use of waters of flowing streams and other sources of supply in this State and the abandonment and forfeiture of such rights, defining and limiting riparian rights, limiting the right to injunction to prevent the beneficial use of water, providing for the acquisition of rights of way for canals, ditches and pipe lines, providing penalties for violations of this act and the unlawful diversion or use of water, establishing a State Irrigation Board, providing the powers and duties of said Board, and fixing their compensation, compelling persons, associations and companies to keep their plants and systems in repair, providing for the appointment and compensation of assistants to said board of engineers, limiting the expenses of such board and its assistants, and providing for the payment thereof, requiring such Board to ascertain, determine and make record of the flow of streams and make guagings thereof and to ascertain and report the quantity of riparian lands on each stream, the amount of water used and needed for the irrigation thereof, and the appropriations of water upon each of the streams, the amount thereof and when each was made, and to make and file maps, and reports showing such riparian lands, use of water thereon and such appropriations, and fixing and defining the unit measurement of water, fixing the rules and rights of priority in the use of water, subjecting the appropriation of water to acts of Congress providing for storage of flood waters, fixing the place of residence of the State Engineer and of the office of said Board and the times of its regular meetings and repealing title VIII, Part IV, of the Civil Code of this State, Sections 1880 to 1902 inclusive, and the act of the Legislature of this State, approved March 3, 1899, entitled "An Act establishing a standard of Measurement of Water, Defining the Equivalent of a Miner's Inch, and Repealing Section 1893, Title VIII, Part IV,

Division 11, of the Civil Code of the State of Montana, and all conflicting laws; and the act of the Legislature of this State approved March 2, 1899, entitled "An Act to authorize the appointment of a Commissioner for the measurement and division of water under decrees of Court in certain cases," and all other laws and parts of laws in conflict with this act.

Be it enacted by the Legislative Assembly of the State of Montana:

Sec. 1. Declaring Ownership of Water in the State.—The waters of all streams and other sources of supply in this State whether flowing above or under ground in known or defined channels, are hereby declared to belong to the State of Montana, subject to all existing rights to the use thereof, whether by reason of riparian ownership or by appropriation.

Sec. 2. Limiting Riparian Rights.—Riparian rights in waters of the streams of this State are hereby confined and limited to the amount of water reasonably necessary and needed for the irrigation of riparian lands and for watering stock and domestic uses on such land; and a riparian owner can not, by injunction or otherwise, prevent the beneficial use of the waters of a stream to which his lands are riparian when the same is not actually needed and used by him for watering stock and for domestic use or irrigation thereon.

Sec. 3. Defining Riparian Rights to Irrigate.—The Riparian right to irrigate is limited to land bounded by the ordinary flow of and riparian to a stream, which is irrigable therefrom, and would be benefitted by irrigation and which is within the watershed of such stream, and may be used only to a reasonable extent and consistent with the equal use thereof by all others entitled to use waters of such stream, and the surplus must be turned back into the stream on such owners land.

Sec. 4. Waters May be Appropriated.—Subject to vested right therein, whether as riparian owners or by appropriation, the waters of any stream or other source of supply may be appropriated for any beneficial public or private use in the manner provided by this act, and not otherwise.

Priority of appropriation for beneficial uses shall give the better right. No appropriation shall be denied except when such denial is demanded by the public interests.

Sec. 5. Subject to Laws of Congress for Storing Water.—All rights to water flowing over, on or across Government lands of the United States, and all flood waters acquired under this act or previous laws of the State, shall be subject to any acts of the Congress of the United States providing for the storage, conservation and distribution of the flood or other unappropriated waters of such streams for public use, and the Government of the United States may, in the interest of the public good, acquire right and title to all or any part of the waters of any of the streams of the State in the furtherance of any such enactments of Congress, by paying to any owner of water rights reasonable and just compensation therefor, to be arrived at by agreement of the parties, if possible; if not, by condemnation proceedings, as provided by law.

Sec. 6. Water Appropriated Appurtenant to Land.—All water appropriated as provided for in this act for the purpose of irrigation shall become appurtenant to and will pass with conveyance of the land for which the right of use is granted, and may be used on other lands upon application therefor and permit issued by said Board; and if use thereof is abandoned, the right thereto shall be forfeited, and the right to the use of the water shall at once revert to the State, and may, upon proper application as in this act provided, be granted to another.

The water rights to all lands acquired by the State under the Act of Congress, Aug. 18th, 1894, entitled "An act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1895, and for other purposes," and the Act of Congress June 11, 1896, entitled "An Act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1897," and an Act of Congress approved March 3, 1901, entitled "An Act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30th, 1902, and for other purposes," shall attach to and become appurtenant to the land as soon as title passes from the United States to the State.

Sec. 7. Rules of Priority.—The doctrine of first in time first in right shall apply to all appropriations of water from any stream in this State, whether made under this act or prior thereto, and all licenses issued under this act for water appropriated hereunder shall relate to and take effect as on the date of filing of the application, and as to the water appropriated prior to the passage of this act, licenses issued as in this act provided shall be prima facie evidence

of priority of rights as to such prior appropriators. But as between persons or lands supplied by appropriators for sale, rental or distribution to others, under the same appropriation, the rights of takers of water from such appropriators shall stand upon an equality, and in case of a shortage of supply there shall be no preferred rights to the water, but all shall share pro rata in the water furnished; provided that any sales or disposition of water or right to use the same in excess of the capacity of the system and the normal available supply of water shall be void.

Sec. 8. Hydrographic Divisions.—The State of Montana is hereby divided into four water divisions as follows:

Water Division number one shall consist of all lands in this State draining to the west of the Continental Divide.

Water Division number two shall consist of all lands within this State draining into the Missouri River above the mouth of Sun River.

Water Division number three shall consist of all lands within this State draining into the Yellowstone River.

Water Division number four shall consist of all lands within this State draining into the Missouri River below the mouth of Sun River and including the lands draining into the Sun River; also the lands draining to the north in the north part of Teton County.

Sec. 9. State Board of Irrigation.—For the purpose of carrying out the provisions of this act there shall be constituted a State Board of Irrigation, to be composed of the State Engineer and superintendents of the water divisions.

Sec. 10. Defining General Powers of the Board.—The State Board of Irrigation, shall under such regulations as may be prescribed by law, have the supervision of the waters of the State, and of their appropriation, distribution and diversion and of the various officers connected therewith.

It may, determine the relative priorities of existing water rights together with the quantity of water belonging to each such right by reason of its beneficial use, record these findings and require claimants to be governed by them;

Regulate the extent and points of diversion from rivers, streams or other waters;

Measure the discharge of streams, the irrigable land under streams; examine reservoir sites and determine the most suitable location for construction of works to utilize the water of state;

Issue and record licenses for use of water; collect fees; administer oaths; adopt and use an official seal;

Inspect irrigation or other works using water and require same to be kept in repair;

Determine what constitutes surplus water and regulate the sale thereof; prevent waste of water;

Settle disputes as to distribution of water; summon witnesses;

Define the duty of water, according to locality soil and crop;

Define the manner in which the measure of water shall be arrived at not inconsistent with the provisions of this act;

Regulate the manner in which water is to be supplied to persons entitled thereto, whether continuously, or at stated intervals, or under both systems;

Make such orders as are deemed necessary from time to time to carry out the provisions of this act, according to their true intent, or to meet any cases which may arise and for which no provision is made in this act, and further, make any regulations which are considered necessary to give the provisions of this act full effect.

Sec. 11. State Engineer.—There shall be a State Engineer, who shall be appointed by the Governor of the State and confirmed by the Senate; he shall hold his office for the term of six years, or until his successor shall have been appointed and shall have qualified; he shall be president of the State Board of Irrigation and shall have general supervision of the waters of the State and the officers connected with its distribution. No person shall be appointed to this position who has not such theoretical knowledge and such practical experience and skill as shall fit him for the position.

Sec. 12. Oath and Bond.—Qualification.—Before entering upon the duties of his office the State engineer shall take the oath of office and shall give a bond to the State of Montana in the penal sum of five thousand dollars, conditioned upon the faithful discharge of the duties of his office, and for the delivery to his successor, or other officer appointed by the Governor to receive the same, all moneys, books, and other property belonging to the State, then in his hands or under his control, or with which he may be legally chargeable as such officer.

Sec. 13. Salary.—The State Engineer shall receive a salary of three thousand dollars per annum.

Sec. 14. Office at the State Capitol.—The State Engineer shall keep his office at the State Capital, in the Capitol building.

Sec. 14. Duties.—The State Engineer shall, as President of the State Irrigation Board, make or cause to be made, measurements and calculations of the discharge of streams which are most used for irrigation, or other beneficial purposes. He shall collect facts and make surveys to determine the most suitable location for constructing works for utilizing the water of the State and to ascertain the location of lands best suited for irrigation. He shall examine reservoir sites and shall, in his report, embody all the facts ascertained by such surveys and examinations, including wherever practicable estimates of the cost of proposed irrigation works, and of the improvements of reservoir sites. He shall become conversant with the water ways of the State and the needs of the State as to irrigation matters, and in his reports to the Governor he shall make such suggestions as to the amendment of existing laws or the enactments of new laws as his information and experience shall suggest; and he shall keep in his office full and proper records of his work, observation and calculations, all of which shall be the property of the State.

He shall as President of the said Board perform such other duties relating to adjudication of recorded claims, approving or denying future appropriations, inspecting works, regulating use of water, and all the provisions of this act are as necessary for the effective administration thereof.

He shall be a member of the Carey Land Act Board and perform such duties as are imposed by the law governing that Board.

Sec. 15. Assistant.—The State Engineer shall have the power to employ an assistant at a total additional expense not to exceed twelve hundred dollars per year; such assistant to be paid out of any money appropriated for that purpose, on certificate of the State Engineer showing the amount of such employment and the compensation therefor.

Sec. 16. Reports.—The State Engineer shall prepare and render to the Governor biennially, and oftener if required, full and true reports of his work, touching all matters and duties devolving upon him by virtue of his office, which report shall be delivered to the Governor on or before the thirtieth day of November, of the year preceding the regular session of the Legislature.

Sec. 17. Division Superintendents, Appointments and Term of.
--There shall be one superintendent for each of the water divisions, who shall be appointed by the Governor, with the consent of the sen-

ate, who shall hold his office four years, except for the first term two of the superintendents shall hold office two years and thereafter for four years, or until his successor is appointed and shall have qualified and who shall reside in the water district for which he is appointed. The superintendent of each water district shall have immediate direction and control of the acts of the water commissioners and of the distribution of water in his water division, and shall perform such duties as shall devolve upon him as a member of the State Board of Irrigation.

Sec. 18. Compensation.—Water division superintendents of water divisions numbers one, three and four shall each be paid for his services as such superintendent (\$1,800) eighteen hundred dollars annually, in monthly installments; the superintendent of water division number two shall receive annually a salary of two thousand dollars (\$2,000) payable in monthly installments in full compensation for all services as water division superintendent and as Secretary of the State Board of Irrigation.

Sec. 19. Oath and Bond.—Before entering upon the duties of his office, such division superintendent shall take and subscribe an oath before some officer authorized by the laws of the State to administer oaths to faithfully perform the duties of his office, and file with the Secretary of State said oath, and his official bond in the penal sum of two thousand five hundred dollars, to be approved as are other official bonds and conditioned for the faithful discharge of the duties of his office.

Sec. 20. Duties of Water Division Superintendent.—Said division superintendent shall have general control over the water commissioners of the districts in his division. He shall, under the general supervision of the State Engineer, execute the laws relative to the distribution of water in accordance with the rights of priority of appropriation, and perform such other functions as may be assigned to him by the State Engineer.

Sec. 21. May Make Regulations.—Said division superintendent shall, in the distribution of water, be governed by the provisions of this title but for the better discharge of his duties he shall have authority to make such other regulations to secure the equal and fair distribution of water in accordance with the rights of priority of appropriation as may, in his judgment, be needed in his division: Provided, such regulations shall not be in violation of the laws of

the State, but shall be merely supplementary thereto and necessary to enforce the provisions of the general laws and amendments thereto.

Sec. 22. Appeal from Division Superintendent.—Any person, ditch company or ditch owner who may deem himself injured or discriminated against by any such order or regulations of such division superintendent shall have the right to appeal from the same to the State Engineer by filing with the State Engineer a copy of order or regulation complained of and a statement of the manner in which the same injuriously affects the petitioner's interest. The State Engineer shall, after due notice, hear whatever testimony may be submitted by petitioner, either orally or by affidavit, and, through the division superintendent, shall have the power to suspend, amend, or confirm the order complained of.

Sec. 23. Water Commissioners to Report to Superintendent.—All water commissioners shall make reports to the division superintendent of their division as often as may be deemed necessary by said superintendent. Said reports shall contain the following information: the amount of water necessary to supply all the ditches, canals and reservoirs of that district; the amount of water actually coming into the district to supply such ditches, canals, and reservoirs; whether such supply is on the increase or decrease, what ditches, canals and reservoirs are at that time without their proper supply, and the probability as to what the supply will be during the period before the next report will be required, and such other and further information as the division superintendent of that division may suggest.

Sec. 24. Reports Filed; Order of Superintendents.—Said division superintendent shall carefully file and preserve such reports, and from them shall ascertain what canals, ditches and reservoirs are, and are not, receiving their proper supply of water; and if it shall appear that in any division of that district any ditch, canal or reservoir is receiving water whose priority postdates that of the ditch, canal or reservoir in another district, as ascertained from his register, he shall at once order such postdated ditch, canal or reservoir shut down and the water given to the elder ditch, canal, or reservoir, his orders being directed at all times to the enforcement of priority of appropriation, according to his tabulated statement of priority, to the whole division, and without regard to the district within which the ditches, canals or reservoirs may be located. The

reports of water commissioners to the division superintendents of irrigation shall be filed and kept in the office of State Engineer.

Sec. 25 Forbidding Connection of Members of Board with Water Companies.—No member of the State Board of Irrigation shall, during his term of office, accept or receive any compensation, directly or indirectly, or take any employment of any kind from any person, corporation or association engaged in supplying water to others under the laws of this State, or who shall have made application for, or contemplates making application for a license to appropriate water under this act. Any violation of the provisions of this section by any member of said Board shall be cause for his removal from office.

Sec. 26 Who Eligible.—No one shall be eligible to serve on the State Board of Irrigation unless he be a competent civil and hydraulic engineer in good standing and have had not less than three years actual and active experience.

Sec. 27. Office and Travelling Expenses of the Board to be Paid by the State—The office expenses of the State Board of Irrigation and the necessary travelling expenses of its members incurred while engaged in the business of said Board, shall be paid by the State out of funds not otherwise appropriated, upon a sworn statement of the State Engineer, or the member incurring such expense, approved by the State Engineer, upon approval of the State Board of Examiners.

Sec. 28. Meetings of Board When and Where Held.—Regular meetings of the State Board of Irrigation shall be held twice each year at the capital of the State, and special meetings may be called at other times and places by the State Engineer for the transaction of any business necessary to be done by the Board. Said Board shall have an office with the State Engineer in the Capitol.

Sec. 29. State Engineer to Preside at Meetings.—The State Engineer, when present, shall preside over all meetings; if not present, one of the superintendents shall be elected by the Board to preside. The Secretary shall keep accurate minutes of the proceedings of the Board in a book provided for that purpose which minutes shall, when correctly made, be approved by the Board and signed by the State Engineer, and when so signed shall be competent evidence of their contents and of the proceedings of the Board.

Sec. 30. Secretary of Board.—The superintendent of water division number two shall be the Secretary of the State Board of Irrigation, and it shall be his duty to keep a full, true, and complete record of the transactions of the said Board and to certify under seal, all certificates of appropriation of water made in accordance with law.

Sec. 31. Members of Board May Administer Oaths.—The members of State Board of Irrigation are authorized to administer oaths in all matters of business transacted before them, or any of them, where an oath is necessary.

Sec. 32. Reports of their Proceedings to be Made by Members of the Board.—In all matters of business transacted or duties performed by any member of said Board not in open meeting of the Board, he shall keep full and accurate minutes thereof, at the time, and preserve the same in such way as to render them easy of reference.

Sec. 33. Records, Etc., Open to the Public.—All records, reports, maps and other papers recorded or filed in the office of said Board shall be open to the public during business hours, and copies thereof certified by the State Engineer shall be furnished on payment of fees provided for by this act:

Sec. 34. Making Existing Companies Subject to this Act.—Any companies already formed to promote irrigation or to sell, rent or distribute water to the public, shall be subject to all of the provisions of this act, relating to such companies, their rights and duties.

Sec. 35. Requiring Reports of Existing Claims.—All persons, corporations or associations having or claiming the right to divert and use any of the waters of any of the streams of this state at the time of the passage of this act, whether as riparian owners or appropriators, are hereby required to make report, under oath, in duplicate, to the said State Board of Irrigation, on forms provided by the Board, within ——— months after the taking effect of this act, showing:

- A. The name and address of such owner or claimant;
- B. The amount of water claimed by him;
- C. From what stream;
- D. The amount of water actually being diverted and used by him;

- E. For what purpose used;
- F. By what means diverted and distributed;
- G. The cost of such works;
- H. The point of diversion on the stream;
- I. If for irrigation, the quantity and description of land irrigated, character of soil, and a map of the irrigating canal or pipe line and the lands irrigated;
- J. If as riparian owner, the quantity and description of the land claimed to be riparian to the stream, and the quantity and description thereof susceptible of and needing irrigation therefrom;
- K. If for the purpose of sale, rental or distribution, the area of land susceptible of irrigation from the system, and the number of acres actually irrigated;
- L. The date of notice of the appropriation and of the actual appropriation of the water claimed.

Sec. 36. Prescribing Penalty for Failure to Make Report.—Every person, corporation or association failing or refusing to comply with the provisions of the last preceding section shall be guilty of a misdemeanor, and shall be fined not less than — or more than ——— for each day they shall fail to make said report in manner and form therein required.

Sec. 37. County Clerk to Furnish List of All Water Claim Filings Prior to the Taking Effect of this Act.—It shall be the duty of the County Clerk to forward to the State Board of Irrigation a list of all water right claims recorded in the County prior to the taking effect of this act, on such blanks as may be prescribed by said Board, said lists to be forwarded within — days after requisition for same.

Sec. 38. Users Who Have not Recorded Claims.—Any person or corporation who has appropriated and used water prior to the passage of this act without filing claim for the same in the County Clerk's office shall at once file claim with the County Clerk and also notify the State Board of Irrigation.

Sec. 39. District Court Clerk shall Forward List of Court Decrees.—It shall be the duty of the Clerk of the District Court to forward to the State Board of Irrigation a list of all Court Decrees in water right cases recorded in his office prior to the taking effect of this act on blanks to be furnished by said Board. Said list shall be forwarded within — days after requisition for same.

The Clerk of the District Court shall, after this act is effective notify the State Board of Irrigation of any decree thereafter made by the District Court effecting a water right immediately after such decree is rendered.

Sec. 40. Requiring Board to Determine Flow of Streams.—It is made the duty of said Board to survey and measure the waters of the streams of the State, co-operating as much as possible with the U. S. Geological Survey and the Experiment Station and without unnecessary delay ascertain and determine the amount of water flowing therein, and susceptible of diversion and use, including both the ordinary flow and flood waters thereof, measuring separately the ordinary flow; such measurements to be made in the order of their importance for irrigation purposes and whenever, in the judgment of the Board such measurement are needed and will be beneficial; provided, that measurements already made, if found reliable and correct by the Board, may be adopted.

Sec. 41. Board to Ascertain and Report Quantity and Description of Riparian Lands, with Maps.—It is also made the duty of said Board to ascertain without unnecessary delay, the quantity and description of lands riparian to each of said streams, how much and what parts thereof are irrigable, and needing irrigation therefrom, and the quantity and what part of said lands are actually being irrigated from the streams, and make a map in duplicate for each stream, showing thereon the matters and things in this section mentioned, and the position of said stream to said lands with regard to the natural flow; and such surveys of riparian lands shall be made upon such streams, and to the extent necessary, in the judgment of the State Board of Irrigation to carry out the provisions of this act.

Sec. 42. Board to Ascertain Existing Appropriations.—Said Board shall also ascertain and determine what notices of appropriation have been filed on each stream, and recorded, as provided by law, and by whom, what of such notices have been good by actual diversion, and use, and how much of the waters of such streams is being used, by whom, and upon what lands.

Sec. 43. Board to Report Results of its Work Under Secs. 40, 41 and 42.—The Board shall make a report in duplicate for each of such streams, showing the amount of water flowing therein, at different seasons of the year, and susceptible of diversion and use, the

amount thereof necessary for use on riparian lands bordering thereon, the amount in actual use, the amount appropriated, diverted therefrom and being used, and the amount of surplus water, if any, remaining and subject to appropriation, stating separately the ordinary flow and storm waters.

Sec. 44. Reports and Maps to be Filed.—The original and duplicate maps and reports above required shall be filed in the office of State Engineer and they or each of them or certified copies thereof shall be competent and prima facie evidence of the facts stated therein or delineated thereon.

ADJUDICATION OF EXISTING CLAIMS.

Sec. 45. Duty of Board at First Meeting.—It shall be the duty of State Board of Irrigation at its first meeting to make proper arrangements for beginning the determination of the priorities of right to the use of the public waters of the State, which determination shall begin on the streams most used for irrigation, and be continued as rapidly as practicable until all the claims for appropriation now on record shall have been adjudicated.

Sec. 46. Streams to be First Adjudicated.—The said Board shall decide at their first meeting the streams to be first adjudicated, and shall fix a time for beginning of taking of testimony and the making of such examinations as will enable them to determine the rights of various claimants.

Sec. 46. Notice to Claimants of Proceedings.—The State Board of Irrigation shall prepare a notice, setting forth the date when the engineer will begin a measurement of the stream and the ditches diverting water therefrom, and a place and a day certain when the superintendent of the water division in which the stream to be adjudicated is situated shall begin the taking of testimony as to rights of the parties claiming water therefrom. Said notice shall be published in two issues of a newspaper having general circulation in the county in which such stream is situated, the publication of said notice to be at least thirty days prior to the beginning of taking testimony by said division superintendent, or for the measurement of the stream by the State Engineer, or his assistant, and the superintendent taking such testimony shall have the power to adjourn the taking of evidence from time to time and from place to place; Provided, All places appointed and adjourned to by the superintendent shall be so situated, as related to the streams, as shall best suit

the proper convenience of the persons interested in the determination of such priorities and appropriations.

Sec. 47. Notice to Claimant to be Mailed.—It shall also be the duty of said division superintendent to mail to each party making use of the waters of said stream, by registered mail, a similar notice setting forth the date when the State Engineer or his assistant, or the division superintendent, will begin the examination of the stream and ditches diverting water therefrom, and also the date when the superintendent will begin the taking of testimony, and the date when the taking of such testimony by said division superintendent shall close.

Sec. 48. Statement of Claimant.—He shall, in addition, enclose with said notice a blank form on which said claimant shall present in writing all the particulars showing the amounts and dates of appropriations to the use of water of said stream to which he lays claim, the said statement to include the information specified in Section 35.

Sec. 49. Statements to be Under Oath.—Each of said claimants shall be required to certify to his statements under oath, and the superintendent of the water division in which the testimony is taken is hereby authorized to administer such oaths, which shall be done without charge to the claimant, as shall also the furnishing of blank forms for said statement.

Sec. 50. Superintendent Takes Testimony, When.—Upon the date named in the preceding notice, the division superintendent shall begin the taking of said testimony, and shall continue until said testimony shall be completed; provided, lengthy oral testimony shall be taken by a stenographer and transcribed at the expense of the claimant; Provided, That in case the division superintendent of any water district is directly or indirectly interested in the water of any stream of his division, the taking of evidence, in so far as it relates to said stream, shall be under the direction of the division superintendent of the next nearest water division, or under the direct personal supervision of the State Engineer, as may be deemed most expedient.

Sec. 51. Notice Upon Completion of Testimony.—Upon the completion of the taking of evidence by the division superintendent, it shall be his duty to at once give notice, in one issue of some

newspaper of general circulation in the county where such determination is, and by registered mail to the various claimants, that upon a certain day, and a place named in the notice, all of said evidence shall be open to inspection of the various claimants, and said superintendent shall keep said evidence open to inspection at said places not less than one day and not more than five days.

Sec. 52. County to Pay Expense of Printing.—All bills for the printing of notices to claimants of water in the adjudications provided for in this title shall be paid for by the county in which the stream, the appropriation of whose waters shall have been so adjudicated, shall be situated, the said bills to be approved by the superintendent of the water division in which the adjudication is made.

Sec. 53. Contests.—Should any person, corporation, or association of persons owning any irrigation works, or claiming any interest in the stream or streams involved in the adjudication desire to contest any of the rights of the persons, corporations, or associations who have submitted their evidence to the superintendents aforesaid, such persons, corporations or associations shall within fifteen days after the testimony so taken shall have been opened to public inspection, in writing, notify the superintendent of the water division in which is located said irrigation works or stream or streams, stating with reasonable certainty the grounds of their proposed contest, which statement shall be verified by the affidavit of the contestant, his agent or attorney, and said division superintendent shall notify the said contestant and the person, corporation, or association whose rights are contested to appear before him at such convenient place as the superintendent shall designate in said notice.

Sec. 54. Hearing.—Said superintendent shall also fix the time, both as to the day and hour, for the hearing of said contest, which date shall not be less than thirty nor more than sixty days from the date the notice is served on the party, association or corporation, which notice and the return thereof shall be made in the same manner as summons are served in civil actions in the district courts of this state.

Sec. 55. Power to Summon Witnesses.—The said State Board of Irrigation, or any member thereof authorized by said Board, when it deems it necessary for the satisfactory carrying out of the provisions of this act or the regulations to be framed under it, may

summon before it or him any person by subpoena, examine such person under oath, and compel the production of papers and writings; and for neglect to obey such summons, or refusal to give evidence or to produce the papers or writings demanded of him, the said Board or members thereof may report such neglect or refusal to the District Court of the County in which the proceedings were had, and such court may compel a compliance with such subpoena or summons by order of said Court, and compel compliance with said order, upon failure to comply therewith; provided outside of the county that the depositions of witnesses may be taken as in civil cases and for like reasons, witnesses to be allowed and paid the fees and mileage allowed in civil cases and shall be paid by the party requiring his testimony.

Sec. 56. Deposit Required.—The superintendent shall require a deposit of eight dollars from each party for each day he shall be so engaged in taking evidence on said contest. Upon the final determination of the adjudication of the matters by the Board, an order shall be entered directing that the money so deposited shall be refunded to the persons, associations or corporations in whose favor such contest shall be determined, and that all moneys deposited by other parties shall be turned over by the superintendent to the State Treasurer to the credit of the fund provided for the maintenance of the State Board of Irrigation.

Sec. 57. Evidence Transmitted.—Upon the completion of the evidence taken in all contests, it shall be his duty to transmit all the evidence and testimony in said adjudication to the office of the said Board in person or by registered mail.

Sec. 58. Measurement of Streams and Ditches.—It shall be the duty of the State Engineer, or some qualified assistant, to proceed at the time specified in the notice to the parties of said stream to be adjudicated, to make an examination of said stream and works diverting water therefrom; said examination to include the measurement of the discharge of said stream and of the carrying capacity of the various ditches and canals diverting water therefrom, an examination of the irrigated lands, and an approximate measurement of the lands irrigated or susceptible of irrigation from the various ditches and canals; which said observation and measurements shall be reduced to writing and made a matter of record in his office, and it shall be the duty of the State Engineer to make or cause to be made a map or plat on a scale of not less than one inch to the mile,

showing with substantial accuracy the course of said stream, the location of each ditch or canal diverting water therefrom, and the legal subdivisions of lands which have been irrigated or which are susceptible of irrigation from the ditches and canals already constructed.

Sec. 59. Order Determining Priorities.—At the first regular meeting of the Board after the completion of such measurement by the State Engineer, and the return of said evidence by said division superintendent, it shall be the duty of the State Board of Irrigation to make and cause to be entered of record in its office, an order determining and establishing the several priorities of right to the use of waters of said stream, and the amounts of appropriations of the several persons claiming water from such streams, and the character and kind of use for which said appropriation shall be found to have been made. Each appropriation shall be determined in its priority and amount by the time by which it shall have been made and the amount of water which shall have been applied for beneficial purposes; Provided, That such appropriator shall at no time be entitled to the use of more water than he can make a beneficial application of on the lands for the benefit of which appropriation may have been secured, and the amount of any appropriation made by reason of an enlargement of distributing works shall be determined in like manner; Provided, That no allotment shall exceed one cubic foot per second for each seventy acres of land for which said appropriation shall be made.

Sec. 60. Limitation on Use of Water, and Its Abandonment.—The priority of right to the use of water shall be limited and restricted to so much thereof as may be necessarily used and appropriated for irrigation or other beneficial purposes as aforesaid, irrespective of the carrying capacity of the ditch, and all the balance of the water not so appropriated shall be allowed to run in the natural channel stream from which such ditch draws its supply of water, and shall not be considered as having been appropriated thereby; and in case the owner or owners of any such ditch, canal or reservoir shall fail to use the water therefrom for irrigation or other beneficial purposes, or shall refuse to furnish any surplus water to the owner or owners of lands lying under such ditch as hereinafter provided, during any two successive years, they shall be considered as having abandoned the same, and shall forfeit all water rights, assessments, and privileges appurtenant thereto, and the waters formerly appropriated by them may be again appropriated for irrigation and other

beneficial uses, the same as if such ditch, canal or reservoir had never been constructed; neither shall the owner or owners of any such ditch, canal or reservoir, have any right to receive from others any royalty for the use of the water carried thereby, but every such owner or owners having a surplus supply of water, and furnishing the same to others from any ditch, canal, or reservoir as hereinafter provided, shall be considered common carriers and shall be subject to the same laws that govern common carriers.

Sec. 61. Board Shall Regulate Sale of Surplus Water.—The owner or owners of any ditch which carries a greater quantity of water than the owner or owners thereof necessarily use for irrigation or other beneficial purposes in connection with their own lands shall, when application is made to them for that purpose, furnish such surplus water at reasonable rates to the owners of lands lying under any such ditch for the purpose of reclaiming such lands and rendering the same productive, or for other beneficial purposes and in case of refusal so to do, the owner or owners of any such ditch may be compelled by injunction suit to furnish such water on such terms as to the court may seem meet and proper; Provided, That the State Board of Irrigation shall have power, when application is made to them by either party interested, to establish reasonable maximum rates to be charged for the use of water furnished by individuals or corporations and for such service the parties shall pay the Board or a member thereof a fee of \$15 for the benefit of the State.

Sec. 62. Adjudication License.—As soon as practicable after the determination of the priorities of appropriation of the use of waters of any stream it shall be the duty of the Secretary to issue to each person, association, or corporation represented in such determination, a license to be signed by the State Engineer, as president of the State Board of Irrigation, and attested under seal by the secretary of said Board, setting forth the name and postoffice address of the appropriator, or if a corporation or association the date of its organization and its principal place of business; the priority number of such appropriations, the amount of water appropriated, from what stream, by what means, the purpose for which, and if such appropriation be for irrigation, a description of the legal subdivision of land to which said water is to be applied.

Such license shall be transmitted by said State Engineer, or by a member of said Board, in person or by registered letter, to the county clerk of the county in which such appropriation shall have

been made, and it shall be the duty of the county clerk upon the receipt of the recording fee, which fee shall be one dollar, to record same in a book especially prepared and kept for that purpose, and thereupon immediately transmit the same to the respective appropriators.

Sec. 63. Effect of Such License.—Such license shall be binding upon the State as to the right of such licensee to use the amount of water mentioned therein, and shall be prima facie evidence as to all other persons, but no license so issued shall have the effect to change the right of any prior appropriator or limit his right to a less quantity of water than he has actually appropriated and is then entitled to use, the purpose of this and the preceding sections being to ascertain and make record of all existing rights in the waters of the streams of the State, and not to divest or interfere with such rights

Sec. 64. Appeal from Board Allowed.—Any party or number of parties acting jointly who may feel themselves aggrieved by the determination of the State Board of Irrigation, may have an appeal from the said Board to the District Court of the judicial district within which the appropriation or appropriations of the party or parties so aggrieved may be situated; Provided, such appeal shall be taken within three months after the party or parties have been notified of the said Board's decision, but not thereafter; except if there be a rehearing before the Board as per Section 73, after which rehearing an appeal may be taken within three months from date of the second decision by the Board, but not thereafter; Provided, further there shall be but one rehearing before the Board in any case by the same party.

Sec. 65. Proceedings on Appeal.—The party or parties appealing shall, within three months after the determination of the said Board, which is appealed from and the entry thereof in the records of the Board, file in the district court to which the appeal is taken a notice in writing stating that such party or parties appeals to such court from the determination and order of the State Board of Irrigation; and upon the filing of such notice, the appeal shall be deemed to have been taken; Provided, however, that the party or parties appealing shall, within the three months mentioned, enter into an undertaking, to be approved by the district court or judge thereof, and to be given to all the parties in the said suit or proceeding other than the parties appealing, and to be in such amount as

the court or judge thereof shall fix, conditioned that the parties giving their said undertaking shall prosecute their appeal to effect, and without unnecessary delay, and will pay all costs and damages which the party to whom the undertaking is given, or either, or any of them, may sustain in consequence of such appeal.

Sec. 66. Duty of Clerk of Court. When Appeal is Perfected.—The clerk of the District Court shall, immediately upon filing of said notice of appeal and the approval of the bond mentioned in the preceding section, transmit to the secretary of the Board a notice over the seal of the court to the effect that said appeal has been perfected, which notice shall be entered of record by the secretary in the records of said Board, and the appellant or appellants shall cause a certified copy thereof to be served on each of the appellees, serving the same in the manner provided for the serving of summons in the district court.

Sec. 67. Transcript to be Filed.—The appellant or appellants, shall, within six months after the appeal, as provided for, is perfected, file in the office of the clerk of the district court a certified transcript of the order of determination made by the State Board of Irrigation, and which is appealed from, a certified copy of all the records of said Board relating to such determination, and a certified copy of all the evidence offered before the said Board; including the measurement of streams, tributaries, and ditches provided for by this act, together with the petition setting out the cause of complaint of the party or parties appealing, to which petition all parties joined as appellees shall be served with notice by the issuance of summons out of the office of the clerk of the district court, within the time and in the manner provided by law for the issuance and service of summons in actions of law.

Sec. 68. Practice on Appeal.—All proceedings of appeal shall be conducted according to the provisions of the code of civil procedure and the practice of appeals from the district courts of the State to the supreme court; Provided, that the practice on appeal in the district court, as to pleadings necessary to be filed and the admission of evidence upon trial shall be the same as is now or may be hereafter provided for by law regulating appeals from the justice court.

Sec. 69. Clerk Shall Transmit Transcript to Board.—It shall be the duty of the clerk of the district court immediately upon the entry of any judgment, order, or decree by the district court or by the

judge thereof, in an appeal from the decision of the State Board of Irrigation to transmit a certified copy of said judgment, order, or decree to the secretary of the said Board. It shall be the duty of the secretary to immediately enter the same upon the records of such office, and the State Engineer shall forthwith issue to the superintendent or superintendents of water divisions instructions in compliance with the said judgment, order, or decree, and in execution thereof.

Sec. 70. Costs and Division Pending Settlement.—All costs made and accruing by reason of such appeal shall be adjudged to be paid by the party or parties against whom such appeal shall be finally determined. During the time an appeal from the order of the State Board of Irrigation is pending in the district court, and until a certified copy of the judgment, order, or decree of the district court is transmitted to the State Engineer, the division of water from the stream involved in such appeal shall be made in accordance with the order of the said Board.

Sec. 71. Stay Bond.—Any time after the appeal has been perfected the appellant or appellants may stay the operation of said decree appealed from by filing a bond in the district court wherein such appeal is pending in such amount as the judge thereof may designate, conditioned that he will pay all damages that may accrue to the appellee or appellees by reason of such order or decree not being enforced, should the proceedings and appeal be decided against the appellant. And immediately upon the filing and approving of such bond to stay the operations of the decree, the clerk of the district court shall transmit to the State Board of Irrigation a notice, over the seal of the court, to the effect that such bond has been filed and that the operations of such decree are stayed during the pendency of such appeal proceedings. This notice shall be recorded in the records of the said Board and the State Engineer shall immediately give proper notice to the superintendent of the water division wherein such appeal may have been taken.

Sec. 72. Appeal to be Advanced on Docket.—Upon any appeal being taken, as is by this chapter provided, from the State Board of Irrigation to the district court of this State it shall be the duty of said court upon motion of either party to advance said appeal upon its trial docket, and to give such appeal precedence over all other civil causes in hearing and determination thereof, and if an appeal be taken from the judgment or the decree of the district court in

any appeal in this chapter provided for to the supreme court of the State, it shall in like manner be the duty of the supreme court upon motion of either party to advance such appeal upon its docket of civil causes, and give it like precedence as to hearing and determination.

Sec. 73. Rehearing.—After any final order of the State Board of Irrigation adjudicating the priorities upon any stream, any party interested therein may within one year thereafter apply for a rehearing for reasons to be stated in the application; and upon the filing of such application the secretary of the Board shall mail written notice thereof to every other party interested, and therein fixing and stating a time when such application will be heard.

Sec. 74. Authority to Modify Order and Correct Testimony.—Upon such hearing the Board shall have authority to modify or alter the original order in such respect as shall appear just and proper; but it shall not be necessary for an application for a rehearing to be filed to entitle any party to an appeal. Upon such hearing the Board shall also have the authority to permit, upon good cause shown, the correction of the testimony of any party or witness if it shall appear that a mistake has occurred therein, but no other new evidence shall be received at such hearing unless it shall be shown to the satisfaction of the Board that the same is material and has been discovered since the taking of original testimony and could not with reasonable diligence have been discovered before that time.

NEW APPROPRIATIONS.

Sec. 75. How Water May Be Appropriated. Application.—All of the waters of any stream not already acquired or held by virtue of the ownership of lands riparian thereto or by diversion and appropriation therefrom may be appropriated for public or private use as follows, and not otherwise:

1. The person or company desiring to appropriate any such water shall file with the State Board of Irrigation, application on blanks provided by said Board, showing:

- A. The name, residence and occupation of the applicant.
- B. The quantity of water desired.
- C. The stream from which it is desired to take the same.
- D. The point on the stream where the diversion is to be made.
- E. The purpose for which the water is to be used, and if for the purpose of irrigation, a description of the land to be irrigated, and a map showing the line and course of the proposed ditch or canal

F. The means by which the diversion and application of water is to be made.

G. If the application is made for the appropriation of water for sale, rental or distribution to others, or by a number of persons for their mutual benefit and not by one person for his own private use, the application shall be accompanied by a plan and map in duplicate of the proposed works for the diversion and application of the water to a beneficial use, showing the character, location and dimensions of their proposed reservoirs, dams, canals, ditches, pipe lines, and all other works proposed to be used by them in the diversion of the water, and the area of lands proposed to be irrigated.

H. The application made for the purposes mentioned in the last preceding subdivision of this section shall also show:

A. The name and principal place of business of the person, corporation or other company or association making the application.

B. If by a corporation, the amount of its capital stock, how much thereof has been actually paid thereon and how, (cash or property or note), and the names and places of residence of its directors.

C. The financial resources of the corporation or person making the application, and the means by which the funds necessary to construct the proposed works are to be provided.

D. The location, character, capacity and estimated cost of the proposed works for the diversion and application to beneficial use of the water to be appropriated.

E. If for the generation of power or any other purpose than irrigation or domestic use, the purpose for which it is proposed to be used, the nature, location, character, capacity and estimated cost of the works, and whether the water used is to be and will be returned to the stream, and if so at what point on the stream.

Sec. 76. Approval or Disapproval of Application.—When said application, maps and plans are presented for filing, the same shall be examined by said State Board of Irrigation, and if in proper form, shall be filed; if not in proper form record shall be made of such applications and they shall be returned to the applicant, with endorsement thereon of the objections thereto, with leave to correct and return the same within thirty days, but not thereafter.

Sec. 77. Action on Application Notice.—If not corrected as required, no further proceedings shall be had thereon. But when filed in compliance with this act, the said Board shall at once, at the expense of the applicant, to be paid in advance, publish in some newspaper of general circulation published at the county seat of the

county in which said appropriation is to be made, a notice of the application made, showing by whom made, the quantity of water sought to be appropriated, the stream from which the appropriation is to be made, and at what point on the stream, the use for which it is to be appropriated, and by what means, which notice shall be published as often as such paper is issued for thirty days, or if no paper is published in any county, then by posting such notice for thirty days in three of the most public places in the county.

Sec. 78. Authorizing Protest.—Any person or corporation interested may at any time within thirty days after the completion of the publication of said notice, file with said Board a written protest against the granting of said application, stating the reasons therefor, which shall be duly considered by the Board, and the Board may, in its discretion, hear evidence in support of or against such application.

Sec. 79. Permit for Construction of Diverting Works.—If the said Board shall determine that the application is in due form and should be granted in whole or in part, a permit signed by the State Engineer shall be issued authorizing the applicant to construct the works for the diversion of the water, or so much thereof as the Board shall determine to be reasonably necessary for the uses and purposes and no more; but the Board may for good and sufficient reason, disapprove and reject the application, but no application shall be rejected when there are unappropriated or unused waters of the stream.

Sec. 80. Appeals.—Any applicant if he shall deem himself aggrieved by the order made by the said Board with reference to his application may take an appeal therefrom to the district court of county in which the point of diversion of the proposed appropriation shall be situated. Such appeal shall be taken within three months after the issuance of the order by the Board and shall be taken within three months after the issuance of the order by the Board and shall be perfected when the applicant shall have filed in the office of the clerk of such district court a copy of the order appealed from, certified by the secretary of the State Board of Irrigation as a true copy, together with the petition to such court setting forth the appellant's reason for appeal, and such appeal shall be heard and determined upon such competent proof as shall be adduced by the applicant and such like proofs as shall be adduced by the said Board, or some person duly authorized in its behalf.

Sec. 81. Limitations on Power to Issue Permits.—No permit issued by the Board shall authorize the construction of works for the diversion of any water the capacity of which shall be in excess of the surplus unappropriated water in any stream, nor shall any permit granted by said Board affect or in any way interfere with previously vested rights in the waters of said stream of whatsoever nature.

Sec. 82. What Permit Shall Contain.—The permit issued by said Board shall state the amount of water authorized to be appropriated, for what purpose, the place of use, the means by which the diversion and application of the water is to be made, and the time within which the works for the diversion and application thereof shall be completed, not exceeding a reasonable time, to be fixed by the Board.

Sec. 83. Inspection and Report of Works When Completed.—Upon the completion of the works for the diversion and application of water under any permit, the holder of said permit, or his assigns, shall report the fact to the State Board of Irrigation, and the State Engineer or the superintendent of the district in which the appropriation is sought to be made, shall without delay, make a full inspection and examination of the works constructed, and make report upon their construction and condition, and whether or not they conform to the terms of the application and permit, and are adequate for the purpose intended.

Sec. 84. License to Use Water When May Issue.—Upon such report being received, if the Board is satisfied the law has been fully complied with and that water to be appropriated is needed for the purpose intended, a license signed by the State Engineer shall be issued to the applicant, or his assigns, entitling him to divert and use said water, or so much thereof as the Board may find to be necessary for use proposed. Licenses granted upon applications made under this act for water not previously appropriated to be numbered consecutively as to each stream in the order as to date when such applications are filed.

Sec. 85. What License Shall Contain.—Said license shall set forth the name of the licensee, and his place of residence, or if a corporation or other company or association, the state of its organization and its principal place of business, the quantity of water he or it is authorized to divert, from what stream, by what means, and

the purpose for which he is authorized to use the same, and if for irrigation, a description of the land to be irrigated.

Sec. 86. Rights Vested by License, and Effect of.—Any license issued as above provided, for water appropriated under this act, shall vest in the licensee the right and title to the use of the amount of water mentioned therein, in the manner and for the purposes therein mentioned, and not otherwise, except as hereinafter provided where appropriated for sale, rental or distribution to others; provided, that such license shall not impair or affect any rights therein vested prior to notice given of the making of the application above provided for.

Sec. 87. Water Appropriated for Sale Held in Trust.—Where license is granted to any person, corporation or association to appropriate water for sale, rental or distribution to others, said licensee shall hold said water in trust for such use and for the persons to whom it is supplied, and not otherwise; and when any part of the water so appropriated shall be applied to and used upon the land of any person or corporation, the right thereto shall thereby become appurtenant to said lands, and the water must continue to be supplied thereto, unless transferred to other lands by agreement of the parties, can only be used thereon, and the right will pass by the conveyance thereof, provided that such right shall be lost to the owner of said land and to said land, and revert to the licensee, in trust, for a failure to use the same thereon for the term of two years, or the voluntary abandonment thereof, or the failure or refusal for one year to pay the licensee the rental or compensation fixed for the use thereof, in the manner agreed upon.

Sec. 88. Limitation of Effect of License.—No license for the diversion of water as above provided for (Sec. 84, 85, 86) in excess of the capacity of the works actually constructed and water actually diverted and applied to beneficial uses, shall be valid.

Sec. 89. Licenses to Store and Use Flood Waters.—The said State Board of Irrigation may, upon application made therefor as provided in this act, and upon like notice, grant to any person, corporation or association a license to divert and store, for beneficial uses, the surplus waters of any stream during floods or high water, or during those portions of the year when water is not required for irrigation purposes; and for the purposes of this section, all water which cannot be or is not used during the seasons of flood or high

water is declared to be surplus water.

Sec. 90. Licenses Must be Recorded.—All licenses issued under the provisions of this act shall be by the licensee recorded in the office of the county clerk and recorder of the county in which the appropriation is authorized to be made, within thirty days after its issuance, and the same shall also, within the same time, be recorded in a book kept for that purpose in the office of the State Board of Irrigation, and such licenses, or certified copies thereof, shall be competent evidence of the right to the use of the water by the licensee or his assigns, and shall be sufficient evidence of such.

Sec. 91. Licenses or Permits For Appropriation May Be Assigned and How.—Permits or licenses for appropriation may be assigned by endorsement thereon and like endorsement on the margin of the records where the same is recorded, provided that such assignment shall not be effective until approved by the State Board of Irrigation, and such approval endorsed thereon, signed by the State Engineer, and no such approval shall be made until said Board is satisfied of the willingness and ability of the assignee to fulfill the obligations imposed by said permit or license and the purposes for which the said appropriation is made.

Sec. 92. Fees to be Paid Under this Act.—The following fees shall be paid for services rendered by the State Board of Irrigation or a member thereof:

For each Adjudication License issued for the use of water which began prior to the passage of this act and which the Board adjudicates, Ten dollars, (\$10.)

For recording said Adjudication License by County Clerk one dollar, (\$1).

The above fees shall be paid to the Division Superintendent at the time of submission of testimony and proof of appropriation of water by each claimant.

For filing and examining Applications for Permits to appropriate water, Five dollars, (\$5).

For the Permit provided to be issued when the application is approved, Three dollars, (\$3).

For the Appropriation License to be issued after the examination and acceptance of any ditch or other works for making a beneficial use of water, Five dollars, (\$5).

For recording said Appropriation License by County Clerk, One dollar, (\$1).

For fixing water rates as provided in Section 61 Fifteen dollars, (\$15).

For settling disputes of partnership ditches as per Sections 99 and 105, all the expenses incurred, including value of time spent.

For recording any water right instrument not specified above, one dollar, and for each additional folio above 100 words twenty cents per folio.

For making certified copies of any paper twenty cents per folio and one dollar for each certificate attached thereto.

In addition to the fees specifically provided for, the party applying for the performance of any duty by said Board or any member thereof, shall pay in advance the amount necessary to publish any notices required by this act to be published, except for the notices in adjudicating claims existing prior to the passage of this act, which shall be paid as per Section 52.

Sec. 92. Board to Account for Fees.—The State Board of Irrigation shall keep an accurate account of all fees received and shall pay the amount thereof, less what is paid to County Clerks, into the General Fund of the State Treasury on the last day of each month.

WATER COMMISSIONERS.

Sec. 92. Districts When and How Formed.—The State Board of Irrigation shall divide the State into water districts, said water districts so constituted as to secure the best protection to the claimants for water and the most economical supervision on the part of the State; said water districts shall not be created until a necessity therefor shall arise, but shall be created from time to time as the appropriations and priorities thereof of the streams of the State shall be adjudicated.

Sec. 93. Commissioner, How Appointed, Term.—For each water district there shall be appointed one commissioner who shall be a resident of the district in which he is to serve, and who shall be appointed by the Governor, to be selected by him from persons recommended to him by the superintendent of the water division in which such water district is situated. Each commissioner shall hold his office two years, and until his successor is appointed and qualified, and the governor shall, by like selection and appointment fill all vacancies which may occur in the office of water commis-

sioner, and may at any time remove any water commissioner for failure to perform his duties as such water commissioner, upon complaint in that respect being made to him in writing.

Sec. 94. When Commissioner to Begin Work.—Said water commissioners shall not begin their work until they have been called upon by two or more owners or managers of ditches, or persons controlling ditches in the several districts, by application in writing, stating that there is a necessity for the use of water; and they shall not continue performing services after the necessity therefor shall cease.

Sec. 95. Duties of Commissioner.—It shall be the duty of said water commissioner to divide the water in the natural stream or streams of his district among the several ditches taking water therefrom, according to the prior rights of each, respectively in whole or in part, and to shut and fasten, or cause to be shut and fastened, under the direction of the superintendent of his water division, the headgates of ditches heading in any of the natural streams of the district when, in times of scarcity of water, it is necessary to do so by reason of the priority of rights of others taking water from the same stream or its tributaries.

Sec. 96. Water Commissioner to Prevent Waste of Water.—Said water commissioner shall so divide, regulate, and control the use of the water of all streams within their respective districts in such manner, as may be, as will prevent unnecessary waste of water, and to that end such commissioner shall so shut and fasten the headgate or gates of all ditches so that no more water will flow into said ditch than is actually required and will be used for the uses and purposes for which such water was appropriated, and any person who may be injured by the action of the water commissioner, or by his failure to act pursuant to this chapter, may resort to the State Board of Irrigation for relief and if dissatisfied with its action may resort to any court of competent jurisdiction.

Sec. 97. Pay of Commissioners.—Water commissioners herein provided for shall each be entitled to pay at the rate of five dollars for each day he shall be actively employed in the duties of his office, to be paid by the county in which his work is performed. Each water commissioner shall keep a true and just account of the time spent by him in the duties of his office and of the time spent by him in the performance of his duties in each county, respectively, into

which his water district may extend, and shall present a true copy thereof, verified by oath, to the Board of County Commissioners of the county in which the work may have been done. And the said Board of County Commissioners shall, upon approval thereof by the superintendent of the water division allow the same.

Sec. 98. Assistants.—Said water commissioner shall have the power in case of emergency and upon approval of the superintendent of that water division, to employ suitable assistants to aid him in the discharge of his duties. Said assistants shall obey the water commissioner's instructions and shall be entitled to four dollars per day for every day he is employed, not to exceed thirty-five days in each year, to be paid upon certificates of the division superintendent, in the same manner as provided for the payment of water commissioners, said four dollars per diem to include all expenses.

PARTNERSHIP DITCHES.

Sec. 99. Superintendent of Water Division May Appoint Distributer.—Whenever two or more persons, joint owners in an irrigation ditch, their lessee or lessees, are unable to agree relative to the division or distribution of water received through such ditch, it shall be lawful for any such owner or owners, his or their lessee or lessees, or either of them, to apply to the Superintendent of the water division in which such ditch is located, by a verified petition setting forth such fact, asking for an order appointing some suitable person to take charge of such ditch for the purpose of making a just distribution of the water through the same, to the several owners or parties entitled to the use of the waters received through such ditch.

Sec. 100. Superintendent Shall Issue Notice, When.—The petition mentioned in the preceding section shall be filed with the superintendent of the water division in which such ditch is located, or a portion thereof, and upon the filing of such petition it shall be the duty of said superintendent to immediately issue an order notifying the owner or owners, lessee or lessees of such ditch other than those filing such petition, and requiring them to appear within five days from the date of the issuance of such notice and to make answer to such petition; Provided, however, that such notice shall be served at least two days before the date fixed therein for the answer.

Sec. 101. Hearing.—The hearing provided for under this chapter may be heard before the superintendent of water division issu-

ing the order, and shall be had upon the day fixed in the order for making answer to the petition filed, or as soon thereafter as possible and the decision of the superintendent shall be final.

Sec. 102. Duty of Person Appointed.—Upon it being made to appear to the satisfaction of the superintendent of water division hearing such application, that the protection of the rights to the use of the water in said ditch of the applicant or applicants requires the issuance of such order, he shall appoint some suitable person, not having a personal interest in such ditch, to divide and distribute the waters received through such ditch as in his judgment justice may require, in accordance to the rights of the several owners, or their lessee or lessees. The person so appointed shall have exclusive control of such ditch for the purposes of dividing and distributing the water received into the same until such time as he may be removed by the order of the superintendent of the water division.

Sec. 103. Statement Required.—The person so appointed shall render to the superintendent of the water district, monthly, or oftener if required, a full and itemized statement of the services rendered by him, and the expenses if any, incurred by him in the discharge of his duty, and upon the approval of such account, or accounts, the superintendent of the water division shall apportion them against the several owners of such ditch in favor of such person so as aforesaid appointed, and the several owners shall immediately pay to the person appointed as local superintendent the amount apportioned to them to pay.

Sec. 104. Compensation.—The person appointed as hereinbefore provided shall receive as compensation for his services the sum of three dollars per day for each day or part of a day in excess of half a day, actually and necessarily spent in the performance of the duties of his office, together with actual expenses; and as security for the payment of his services and expenses as may be allowed, he may file in the office of the county clerk of the county wherein said ditch is located, the itemized account or accounts when allowed as above, provided it be accompanied with an affidavit as to amount unpaid thereon, and when so filed it shall constitute a valid lien against the interest in said ditch of the owner in default of payment, which may be enforced in the same manner as provided by law for the enforcement of mechanics' and builders' liens.

Sec. 105. Fees.—There shall be paid as fee, by the ditch owners or lessees, for the superintendent's services all expense incurred by him, including his time, in adjusting the dispute which fee shall be accounted for as are other fees under this act.

Sec. 106. Majority of Owners May Maintain Ditch.—In all cases where irrigation ditches are owned by two or more persons and one or more of such persons shall fail or neglect to do his, her, or their proportionate share of the work necessary for the proper maintenance and operation of such ditch or ditches, such other owner or owners, being a majority of the owners of such ditch, desiring the performance of such work, may, after having given ten days written notice to such owner or owners who have failed to perform their proportionate share of such work necessary for the operation and maintenance of said ditch or ditches, perform such labor and recover therefor from such person or persons so failing to do his, her or their share of such work in any competent court having jurisdiction of the subject matter, the expense of such work or labor so performed.

Sec. 107. Lien for Work Performed on Ditch.—Upon the failure of any co-owner to pay his proportionate share of such expense, as mentioned in the preceding section, within thirty days after receiving a statement of the same as performed by his co-owner or owners, such person or persons so performing such labor may secure payment of said claim by filing an itemized and sworn statement thereof, setting forth the date of the performance and the nature of the labor so performed with the county clerk of the county wherein said ditch is situated, and when so filed it shall constitute a valid lien against the interest of such person or persons who shall fail to perform their proportionate share of the work requisite to the proper maintenance of said ditch, which said lien when so taken may be enforced in the same manner as provided by law for the enforcement of mechanic's and builder's lien.

Sec. 108. Stockholders of Co-Operative Ditch Companies Assessable.—Any ditch or irrigation company or association, all the property or capital stock of which is owned by farmers or others, owning lands under the line of such company's or association's ditch and receiving water therefrom by reason of their being owners or stockholders in said company or association, shall have the right to levy and collect such annual assessments on the capital stock of said company, or members or owners of such association,

whether said capital stock be fully paid up or otherwise, as may be deemed necessary by the trustees of said company, or a majority of the stock of such association, for the purpose of maintaining its ditches, flumes, tunnels, and the payment of all necessary expenses of such company; Provided, that this section shall only apply to such water companies or associations whose capital stock or ditch property is wholly owned by persons or corporations owning land under the line of their ditches and using water therefrom by reason of their being such stockholders in said companies; And provided further, that said company or association shall have the right to close the headgate and refuse water to all such stockholders, owners, or members who fail or refuse to pay said assessments after ten days' notice thereof, in writing, made by the president, agent, or attorney of said company or association.

Sec. 109. Appropriator Shall Maintain Headgate.—The appropriator of any of the public waters of the State shall maintain, to the satisfaction of the division superintendent of the district in which the appropriation is made, a substantial headgate at the point where the water is diverted, which shall be of such construction that it can be locked and kept closed by the water commissioner; and such appropriator shall construct and maintain when required by the division superintendent, a flume or measuring device, as near the head of such ditch as practicable, for the purpose of assisting the water commissioner in determining the amount of water that may be diverted into said ditch from the stream. If any owner or appropriator of public waters that have been adjudicated upon should neglect or refuse to put in such headgate or measuring device, after thirty days notice to do so by the division superintendent, the said superintendent may notify the county commissioners of the county where such headgate, flume, or measuring device is situated; and it shall be the duty of said county commissioners when so notified by said division superintendent to put in such headgate, flume, or measuring device at the expense of the county where the expense is incurred, and present a bill of costs to the owner, or owners, of the ditch; and if such owner or owners shall refuse or neglect, for three days after the presentation of such bill of costs to pay the same, the said costs shall be made a charge upon said ditch, and shall be collected as delinquent taxes, and be subject to the same conditions and penalties as other delinquent taxes, and until the full and complete payment of such bill of costs it shall be the duty of the water commissioner to the district in which such ditch is situated to close

and keep closed the headgate of such ditch, and take such needful steps as will prevent any water from being diverted therein from the source of supply.

Sec. 110. Dams, Plans of.—Duplicate plans for any dam across the channel of a running stream, above five feet in height, or of any other dam intended to retain water, above ten feet in height, shall be submitted to the State Engineer for his approval, and it shall be unlawful to construct such dam until the said plans have been approved.

Sec. 111. Engineer's Authority to Inspect.—The State Engineer shall have authority to examine and inspect, during construction, any dam authorized under the provisions of this chapter, or any ditch, canal, or other work carrying over fifty cubic feet of water per second of time; and at the time of such inspection he may order the parties constructing such dam, or other works, to make any addition or alteration which he considers necessary for the security of the work or the safety of any person or persons residing on or owning land in the vicinity of such works.

Sec. 112. Inspection, When Desired.—Should any person or persons residing on or owning land in the neighborhood of any irrigation works after completion or in course of completion, apply to the State Engineer in writing desiring the inspection of such works, the State Engineer may order an inspection thereof. Before doing so he may require the applicant for such inspection to make a deposit of a sum of money sufficient to pay the expenses of an inspection, and in case the application appears to him not to have been justified he may cause the whole or part of such expense to be paid out of such deposit. In case the application appears to the State Engineer to have been justified, he may require the company to pay the whole or part of the expenses of inspection, and the same may be collected in the same manner as provided for the collection of the expense of constructing headgates and measuring flumes.

Sec. 113. Liability of Owners of Reservoirs.—The owners of reservoirs shall be liable for all damage arising from leakage or overflow of the waters therefrom, or by floods caused by breaking of the embankments of such reservoir.

Sec. 114. Companies Must Keep Plants in Repair.—It shall be the duty of all persons, corporations or associations to keep and maintain their ditches, dykes, flumes, canals, reservoirs or dams in

reasonable repair, at their own expense, and if they shall fail to do so, it shall be the duty of the State Board of Irrigation to notify them of their failure so to do and of the repairs necessary to put the plant in proper condition, and require the necessary repairs to be made; and if any such person, corporation or association shall fail to make the needed repairs, said Board is authorized to bring mandamus proceedings in the District Court of the county in which such plant is situated to compel the making of such necessary repairs.

Sec. 115. Power of Board to Inspect Works and Keep in Repair.—The State Board of Irrigation or any member thereof is given authority to inspect any works for the diversion and distribution of water, whether by private individuals or by corporations, and it is made the duty of the Board to see that all canals, ditches, flumes, pipe lines and other works for the diversion, distribution and use of water are kept in good condition and repair, and to prevent waste or over use of water by any riparian owner or appropriator of water.

Sec. 116. Board to Enforce this Act.—It shall be the duty of the said State Board of Irrigation, whenever there is insufficient water to supply all legal claims, to see that the provisions of this act forbidding the excessive use, use without legal right, and waste of water are strictly enforced, and to prosecute any and all persons, corporations or associations who shall violate any of such provisions.

Sec. 117. Board to Supply Blanks.—It shall be the duty of the said Board to prepare and supply, at the expense of the State all blanks necessary for use in carrying out the provisions of this act.

Sec. 118. Penalty for Unlawful Diversion of Water.—Every person violating any of the provisions of this act or diverting water from any stream without complying with the provisions of this act, unless such person has procured the right to take such water before the passage of this act, shall be guilty of a misdemeanor.

Sec. 119. Penalty for the Excessive use of Water.—Every person who shall knowingly and willfully divert and take away from any stream more water than he legally acquired the right to divert therefrom, under this act or by compliance with previously existing laws, or who shall knowingly allow water taken from a stream to go to waste by reason of imperfect works used by him for the

diversion and use of such water, or by other act or neglect of his own, shall be guilty of a misdemeanor.

Sec. 120. Ditch Owners to Protect Fish.—It shall be the duty of every person, corporation, or company who shall construct, maintain, or operate any ditch or canal under the provisions of this title to construct and maintain, at the point and place where the water is diverted from its natural channel, some fit and proper obstruction whereby all fish will be prevented from entering the said ditch or canal. Any person, company or association violating the provisions of this section shall be adjudged guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than one hundred dollars, or by imprisonment in the county jail not less than ten days nor more than sixty days, or by both such fine and imprisonment.

Sec. 121. Water May be Turned into Channel of Another Ditch.—The water appropriated may be turned into the channel of another stream and mingled with its waters, and then be reclaimed; but, in reclaiming it, water already appropriated by another must be diminished in quantity or deteriorated in quality.

Sec. 122. Interference with Headgate, Penalty.—Any person who shall willfully open, close, change or interfere with any headgate or water box without authority, or who shall willfully use water or conduct water into or through his ditch which has been lawfully denied him by the water commissioners or other competent authority, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be fined in a sum not exceeding one hundred dollars or imprisonment in the county jail for not exceeding six months, or both such fine and imprisonment; and the possession or use of water when the same shall have been lawfully denied by the water commissioner or other competent authority shall be deemed prima facie evidence of the guilt of the person so using it.

Sec. 123. Destroying Water Improvements, Penalty.—Any person or persons who shall knowingly and willfully cut, dig, break down, or open any gate, bank, embankment, or side of any ditch, canal or reservoir, flume, tunnel, or feeder, in which such person or persons may be joint owners, or on the property of another, or in the lawful possession of another or others, and used for the purpose of irrigation, milling, manufacturing, mining, or domestic purposes, with intent maliciously to injure any person, association or corpora-

tion, or for his or her own gain, unlawfully, with the intention of stealing, taking, or causing to run or pour out of such canal or reservoir, feeder, or flume any water for his or her own profit, benefit, or advantage, to the injury of another person, persons, association, or corporation lawfully in the use of such water, or of such ditch, canal, tunnel, feeder or flume, he, she, it or they so offending shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in the sum not exceeding one hundred dollars, and may imprisoned in the county jail not exceeding six months, or both, in the discretion of the court. And the possession or use of water when the same shall have been unlawfully taken shall be prima facie evidence of the guilt of the person or company using it.

Sec. 124. Power to Arrest.—The water commissioners, or their assistants, within their districts shall have power to arrest any person or persons so offending, and turn them over to the sheriff of the proper county; and immediately upon delivering any such person so arrested into the custody of the sheriff, it shall be the duty of the water commissioner making such arrest to immediately, in writing and upon oath, make complaint before the proper justice of the peace against the person so arrested.

RIGHT OF WAY.

Sec. 125. Right of Way Defined.—The right to conduct water from or over the land of another for any beneficial use, includes the right to raise any water by means of dams, reservoirs or embankments to a sufficient height to make the same available for the use intended, and the right of any and all land necessary therefor, may be acquired upon payment of just compensation in the manner provided by law for the taking of private property for public use; Provided further, that if it is necessary to conduct the water across the right of way of any railroad, it shall be the duty of the owners of the ditch or flume to give thirty days notice in writing to the owner or owners of such railway of their intention to construct a ditch or flume across the right of way of such railroad and the point at which such ditch or flume will cross the railroad; also the time when the construction of said ditch or flume will be made. If the owner or owners of such railroad or their agent fails to appear and attend at the time and place fixed in said notice, it shall be lawful for the owner or owners of said flume or ditch to construct the same across the right of way of such railroad, without further notice to said owner or owners of the railroad.

Sec. 126. When Land Owner Entitled to Right of Way. Dam-
ages.—When any person owning a water right has not sufficient length of area exposed to a stream to obtain the required fall of water to irrigate his land, or the land used by any one for agricultural purposes is too far removed from a stream and he lacks water for such land, he shall be entitled to right of way through the farms or tracts of lands which lie between him and said stream, or the farms or tracts of land which lie above and below him on said stream for the purposes herinbefore stated; Provided, that in the construction, keeping up, and using any such ditch through the lands of another person, the person or persons constructing or using said ditch, or whose duty it is to keep the same in repair, shall be liable to the person owning or claiming such land for all damages accruing to such person by reason of said construction, keeping up, and using said ditch.

Sec. 127. Extent of Right of Way.—Such right of way shall extend only to a ditch, dyke, or cutting, or flume sufficient for the purposes required.

Sec. 128. Petition to County Commissioners for Appointment of Appraisers.—Upon the refusal of owners of tracts of land, or lands, through which said ditch is proposed to run to allow of its passage through their property, the persons desiring to open such ditch may present to the county commissioners of the county in which said lands are located a petition signed by the person or persons, describing, with convenient accuracy, the lands so desired to be taken as aforesaid, setting forth the name or names of the owner or other person interested, and praying the appointment of three appraisers to ascertain the compensation to be made to such owner or persons interested. Upon receipt of said petition, the said county commissioners shall give notice, at least thirty days prior to the appointment of said appraisers, by public notice in a newspaper, when published in the county, or if no paper by posting three or more notices in three different places in said county, stating that such appraisers will be appointed on the — day of —.

Sec. 129. Proceedings of Appraisers. Payment of Assessment.—The said appraisers, before entering upon the duties of their office, shall take an oath to faithfully and impartially discharge their duties as said appraisers. They shall hear the proofs and allegations of the parties, and any two of them, after reviewing the prem-

ises, shall, without fear, favor, partiality, ascertain and certify the compensation proper to be made to said owner, or persons interested, for the lands taken or affected, as well as all damages accruing to the owner or person interested in consequence of the condemnation of the same, making such deduction allowance for real benefits or advantages as such owner or parties interested may derive from the construction of any such ditch or flume. They, or a majority of them, shall subscribe a certificate of their said ascertainment and assessment, which shall be recorded in the County Clerk's office of the county in which said lands are situated, and upon the payment of the compensation (if any), the said person or persons shall have the right of way to construct said ditch or flume.

Sec. 130. May Arbitrate Claim for Right of Way.—Upon the refusal of the owner or owners of land or lands through which any person or persons are desirous of constructing any irrigation ditch or ditches, then it shall be lawful for the parties interested to settle their matter by the appointment of a board of arbitration consisting of three men, as hereinafter provided.

Sec. 131. Appointment and Proceedings of Arbitrators.—The creation of the board of arbitration shall be as follows: The person or persons desiring the construction of such ditch or ditches, and the owner or owners of the land or lands through which the construction of such ditch or ditches is contemplated, shall each choose one disinterested resident property holder of the county in which the land or lands above mentioned are situated, and the two so chosen shall designate a third person with like qualifications as themselves, and it shall be lawful for those persons to immediately proceed to hear the proof and allegations of the parties concerned. It shall be lawful for any two of such a board of arbitration to make such assessment of damages as may in their judgment be deemed just and right, taking into consideration the benefits, if any, that may accrue to the owner or owners of the land or lands through which the construction of such ditch or ditches is contemplated.

Sec. 132. Appeal to Commissioners.—Should the verdict or assessment of such board of arbitration be unsatisfactory to either or both of the parties interested, then recourse may be had by an appeal made in writing, within ten days from the rendering of such verdict by such board of arbitration, addressed to the Board of County Commissioners of the county in which the contestants reside; in which case the party taking the appeal shall give bonds for all costs;

then the case shall stand as though no action had been taken in the matter, and the parties may then proceed under this chapter in the same manner as though the proceedings to ascertain the compensation to be given had been taken before the county commissioners in the first instance.

Sec. 133. If No Appeal is Taken, Award is Final.—In case no appeal is taken as above provided by either of the parties interested, then the finding of such board of arbitration, shall be binding and final; Provided, the sum of money agreed upon by the board of arbitration has been tendered or paid, a deed for such right of way executed and delivered or tendered by the party or parties over whose land the right of way is sought.

MISCELLANEOUS.

Sec. 134. When Commissioners to Bridge Ditches. Expenses.—When any ditch or water course shall be constructed across any public traveled road, and not bridged within three days thereafter, it shall be the duty of the officer having said road in charge, to put a bridge over said ditch or water course, and call upon the owner or owners of said ditch or water course to pay the expenses of constructing said bridge, and if payment thereof be refused, a civil action by the county commissioners may be maintained for the recovery of the same, together with all accruing costs.

Sec. 135. Ditches and Water Companies May Issue Bonds.—Every corporation organized under the laws of Montana for the purpose of constructing or operating a system of waterworks, within the corporate limits of any city or town; and every ditch and water company organized under the laws of Montana shall have power, and is hereby authorized to mortgage or execute deeds of trust, in whole or in part, of their real and personal property and franchises, to secure money borrowed by them for the construction or operation of their water works or ditches, and may also issue their corporate bonds, make all of said bonds payable to bearer or otherwise negotiable by delivery, and bearing interest at such rates, and may sell the same at such rates and prices as they may deem proper; said bonds shall be made payable at such times, and the principal and interest thereof may be made payable within or without this State, at such place or places as may be determined upon by said company.

Sec. 136. Attorney General and District Attorney Made Ad-

visers of the Board.—In all matters requiring legal advice in the performance of their duties, and the prosecution or defense of any action growing out of the performance of their duties, the Attorney General of the State and the District Attorney of the county in which any legal question arises shall be the legal advisers of the State Board of Irrigation, and they are hereby required to perform any and all legal services, and commence, prosecute and defend all suits required of them by the said Board, without other compensation than their salaries now or hereafter fixed by law.

Sec. 137. How Proceedings of the Board Enforced.—Said Board shall have and is hereby granted power and authority to correct abuses and violations of this act through the medium of the courts and to bring and prosecute all necessary actions therefor, and shall be entitled to mandatory and restraining process of the court to enforce the same.

Sec. 138. Rights How Abandoned.—All rights to the use of water acquired under this act or otherwise, shall be lost and abandoned by a failure, without sufficient excuse, for the term of two years, to apply to a beneficial use the water appropriated; and it is made the duty of the State Board of Irrigation to make record in their office of such abandonment.

Sec. 139. Unit of Measurement.—Under this act, the discharge of one cubic foot of water per second shall be the unit of measurement of flowing water, and the acre foot the unit of measurement of quantity. The acre foot is equivalent to 43,560 cubic feet.

Where water rights expressed in miner's inches have been granted, one hundred miner's inches shall be considered equivalent to a flow of two and one-half cubic feet (18.7 gallons) per second; two hundred miner's inches shall be considered equivalent to a flow of five cubic feet (37.4 gallons) per second, and this proportion shall be observed in determining the equivalent flow represented by any number of miner's inches.

Sec. 140. Repealing Existing Laws.—Title VIII, Part IV, of the Civil Code of this State, sections, 1880 to 1902 inclusive, and the act of the Legislature of this State, approved March 3, 1899, entitled 'An Act establishing a standard of Measurement for Water, Defining the equivalent of a Miner's Inch, and Repealing Section 1893, Title VIII, Part IV, Division II, of the Civil Code of the State of Montana, and all conflicting laws; and the act of the Legislature of

this State approved March 2, 1899, entitled "An Act to authorize the appointment of a commissioner for the measurement and division of water under decrees of the Court in certain cases," and all other laws and parts of laws in conflict with this act, are hereby repealed.

One Million Acres Arid Land Given to the State by the Government.

HOW THE STATE SHOULD RECLAIM THIS LAND.

MONTANA AND WYOMING LAW AND RESULTS.

The Montana Legislature, in 1895, enacted a law to enable the state to accept the offer of the United States, viz: 1,000,000 acres arid land conditioned upon its reclamation under the Carey Act.

The same year Wyoming enacted, for a similar purpose, a law quite different from the one passed by Montana. Under that law Wyoming has reclaimed 50,000 acres of arid land and, in 1901, 4,000 people settled on her land thus reclaimed. In addition Wyoming has partly completed projects which will, when finished, increase the reclaimed area 200,000 acres.

Montana has under her laws, in seven years, reclaimed 14,000 acres (Dearborn Canal) and expects to add 19,000 acres to that. Since both states had to contend with similar conditions, in the east, as to enlisting capital and securing settlers, and since Montana offers equally good soil and climate with better markets, it seems a fair conclusion that the very much better results achieved by Wyoming were due, in large measure at least, to the difference in the respective laws.

THE CAREY ACT—

As approved, Aug. 18, 1894, the Carey Act limited time for reclamation by the State, of arid land thus donated to it, to ten years, and required occupation and cultivation by settler of not less than 20 acres in each 160 acres before patent would be issued. The 1896 amendment permitted patent to the State upon completion of the irrigation works and putting water on the land, but did not extend the original ten year limit. The amendment of March 3, 1901 provides, "that the ten years' period within which any State shall cause the lands applied for under said Act to be irrigated and reclaimed,—shall begin to run from the date of approval by the Secretary of the Interior of the State's application for segregation of such lands," at the end of that period it is optional with Secretary

of the Interior to extend it five years or restore such lands to the public domain if not reclaimed.

WHAT THE STATE CAN DO.

The effect of this last amendment is an extension that can and will result in much benefit to Montana if we but enact wise laws and are energetic in administering them.

The State has not deemed it wise to attempt directly the reclamation of lands, nor to assume any liability for those who did reclaim. All it has done was to make appropriations of \$7,000 and create a commission.

Whether the State as such, should enter directly into the business of reclamation is a debatable question, but after careful consideration my conclusion is against such a policy. The State can and should, with very slight expense for clerical work, and without incurring one dollar of direct or contingent liability, put itself in position to benefit as much or more than Wyoming has under this offer of the Government. It is to accomplish that desirable object that I offer for public discussion and legislative action the proposed law herewith.

The present State Arid Land Grant Commission law, in seven years has shown defects. A commission, no matter how able or willing, who are scattered about the State, practically without funds except such as could be raised by promoting, and without the aid of an engineering department is very heavily handicapped. Such a commission must first solve, or hire and pay an engineer for solving, engineering problems, it must enlist large amount of capital and secure settlers; three difficult things. Then if successful the law compels a 20 per cent profit upon cost of reclamation to be added before land is offered the settler, and also ties up this 20 per cent for from ten to thirty years as additional security for bond holder, instead of making the profit, which belongs to the state, immediately available to the State.

POSITION OF STATE UNDER PROPOSED LAW.

Under the proposed law Montana would occupy this position: she would not directly undertake reclamation as a State, with the attendant need for money and the risk of unwise expenditure, nor would she incur any contingent liability or lend her credit; instead of any of these, the State having the choice of vacant government lands to amount of 1,000,000 acres would offer to consider proposals from a person, co-operative association or corporation for the

reclamation of any part of this 1,000,000 acres, subject only to such conditions as will protect the respective interests of the capital invested to reclaim the land, of the settler on such land, and of the State itself. Capital is entitled to safety and to reasonable interest, the settler to clear titles, to reasonable price and terms for land and water right; the State should endeavor to bring these two elements together for their mutual benefit, it should protect both; it should also consider the future and it should encourage and aid settlement but in such a manner as to conserve not barter a rich heritage.

The aim of the proposed law is to accomplish the foregoing: it is based on the experience of Montana and Wyoming. Following largely the Wyoming law it differs in some details. Wyoming has a uniform selling price for the land of fifty cents per acre, a maximum selling price for perpetual water rights of \$16 per acre, and a maximum charge for maintenance and operation expense of works until turned over to settlers of 40 cents per acre. As the reclaimed lands are not uniform in value it is deemed just to provide for their classification and a price accordingly, which has been fixed at fifty cents minimum and \$2.50 maximum, per acre. Unless this is done the State would part with its best lands first and have left on its hands the land less salable.

The maximum price of the perpetual water right is fixed at \$12.50 per acre, which is the maximum cost of reclamation under our present law; but that law requires 20 per cent to be added which makes the selling price \$15 per acre for water and land. To guard against companies which reclaim making excessive profits by charging the maximum allowed by law, all proposals are subject to careful scrutiny of State Engineer and if the cost of construction appears unreasonable he so reports and the Board either rejects or requires proper reduction, and then fixes by contract the price and terms which will be asked of settler by the company.

LAND MAY BE SOLD OR LEASED.

Under existing law the land must be sold, this requires settlers to have considerable cash in hand or else assume a large debt, then if unable to meet it suffer proportionate loss. Believing this operates against the best interest of state and settler, the law is framed to permit sale or lease of not to exceed 160 acrs to one person. It should be remembered that statistics show irrigated lands increase in value by reason of irrigation (as well as by increase of population) and that irrigated farms decrease from an acreage of 160 to 80 or less.

Now the settler with limited means who wishes to control 160 acres but lacks funds and is unwilling to assume the debt and interest burden can buy outright 40 or 60 acres and lease the balance to make 160 if he desires. This makes easier and quicker the obtaining of settlers, which results in quicker and larger returns to the capitalist, and immediately benefits the State. The difficulties have been to obtain capital then to secure settlers; this plan will be more attractive to settlers and investors. As the inevitable tendency is to decrease the number of acres held by single individuals the leased lands would be relinquished and could be released or sold as seemed best. Meantime the increased value of such land would inure to the State. In other words such a policy requires less investment or debt for the settler on account of land and enables him to erect better buildings or buy more stock with the part of his capital thus freed. This gets more settlers, quicker and larger returns to capital used in reclaiming the land, and preserves for the state part of the increased land value.

MAXIMUM RESULT AT MINIMUM EXPENSE.

Salaries of the Arid Land Grant Commission when active have been \$4,500 a year, the engineer's travelling and office expense all extra. Under the proposed law a secretary whose salary is fixed by the Board in proportion to services but cannot exceed \$150 per month does all the detail work except what belongs in the engineering department and is cared for by the State Engineer. Heretofore the engineering expense was about the same as all the other expense or rather more than one-half the total disbursements. By the proposed law a maximum of result at a minimum cost is possible.

Respectfully submitted,

F. H. RAY,
Ass't State Examiner.

EXPENSES OF STATE ARID LAND GRANT COMMISSIONERS.

Gov. Rickards Commission	\$3,831 19	
Gov. Smith Commission—		
Missouri Valley Survey	50 40	
Great Falls and Benton	35 00	
Great Falls and Sag Lake	203 20	
District No. 1- (Billings)	6,966 75	
District No. 2, Big Timber, excluding purchase of Holland Ir- rigation Canal Co	14,188 74	
District No. 3, Bridger, includes purchase of rights ..	6,119 02	
District No. 4, Dearborn Canal	34 70	
District No. 5, Sun River	149 00	
Furniture and Fixtures	688 78	
Office expenses, not apportioned among the districts	5,774 16	
Salaries of the Commission from April, 1897	19,494 27	
		\$57,535 21

CASH DISBURSED.

Of above there was paid out of State Treasury only ..	\$5,705 65	
Cash was also derived from the following sources and all disbursed on account above expenses:		
Subscription Billings District No. 1.....	\$1,000 00	
Holland Irrigation Canal Co., advanced.....	\$3,142 70	
Holland Irrigation Canal Co., for bonds.....	25,000 00	
Holland Irrigation Canal Co., paid accounts for Com	1,417 79	
	29,560 49	
Refund from Land Office	8 00	
L. D. Beary, advances	301 50	
Discounting Warrants—		
On Fund A, District No. 1.....	2,216 50	
On District No. 2, new issue	4,187 30	
		\$42,979 44

LIABILITIES OF THE COMMISSION JAN'Y 1, 1903.

Personal accounts on Commission Ledger.....	\$2,781 33	
Warrants Federal Grant Reclamation Fund, unpaid..	2,194 20	
Warrants Fund A, District No. 1, unpaid.....	2,359 56	
Warrants New Issue District No. 1 unpaid..	1,605 68	
Warrants District No. 4, unpaid	9,755 98	
		18,697 45

The above are not liabilities against the State direct. The State is under obligation to care for any profits derived from sale of land reclaimed under the Carey Act, but unfortunately for holders of above the present law requires the 20 per cent profit to be placed in Fund B, which must be used first to pay bonds issued against the reclaimed land in each District; these bonds run for 10-30 years at 6 per cent and until all paid no part of the fund can be diverted. If after all the bonds and interest thereon have been paid, there is a balance it may be applied to paying debts of the Commission and reimbursing state.

Besides above liabilities there are outstanding Warrants issued on District No. 3, (Bridger); as these are payable "out of any funds received by Commission in payment of water rights" in said District, they are \$2,434 51 not an obligation against any other fund. District No. 3, is defunct, so these warrants are worthless.

There is outstanding also Warrants, Fund A, District No. 2, for which Bonds were issued to Holland Irrigation Canal Co., said warrants not being returned, but apparently lost by H. I. C. Co., the Commission was required \$1,118 15 by the State Examiner to get from the President of the H. I. C. Co., A. Wormser, an indemnifying bond for the amount, so this contingent liability is offset by said bond, and it so appears on Commission's books.

BONDED INDEBTEDNESS OF THE DISTRICTS.

District No. 2, Big Timber, for purchase H. I. C. Co. and advances	\$132,000 00
District No. 4, Dearborn, for 35 per cent of Engineers estimate on the Con- tract with Mississippi Valley Trust Co.....	181,000 00
No land has been reclaimed in No. 2.	
14,000 acres reclaimed in No. 4, and completion of the contract is expected to add 19,000 acres more.	

PROPOSED LAW ABOLISHING THE STATE ARID
LAND GRANT COMMISSION, AND CREATING IN
PLACE THEREOF THE CAREY LAND
ACT BOARD.

An Act to Enable the State to Accept the Offer of the United States, viz: 1,000,000 acres of arid land under an Act of Congress, commonly known as the Carey Act, approved Aug. 18, 1894, amended June 11, 1896, and March 3, 1901, by abolishing the State Arid Land Grant Commission, and establishing instead the Carey Land Act Board, to be composed of the Governor, State Engineer, and Register of the State Land Office, defining the duties and powers of said Board, providing that it serve without additional compensation, providing the method of letting contracts for reclamation of arid land, fixing time allowed for construction of works, conditions of forfeit, relieving the state of liability, providing for the classification of reclaimed land, and disposal of same within minimum or maximum price fixed, disposition of fund thus derived, making water right appurtenant to land, authorizing liens, conditions of their foreclosure, fixing time and manner of redemption, right of way, compelling contractor to maintain and operate works until turned over to settlers, limiting price to be charged for such maintenance and operation, requiring contractor to put settlers on land, fixing fees, requiring reports, making eight hours a day's work and prohibiting Mongolian labor on any contract under this act, and repealing conflicting laws.

Be it enacted by the Legislative Assembly of the State Montana:

Section 1. Creating Carey Land Act Board.—For the purpose of enabling the State to accept the offer of the United States, made by Act of Congress approved Aug. 18, 1894, entitled "An Act making appropriations for sundry civil expenses of the Government for the fiscal year ending June 30, 1895, and for other purposes," and as amended by an Act of Congress approved June 11, 1896, and as further amended by an Act of Congress approved March 3, 1901; for the purpose of reclaiming the lands therein mentioned in accordance with the terms of said acts, so that State can obtain title thereto, a Board shall be and is hereby created under the name of the Carey Land Act Board, which shall consist of three members, and they and their successors shall remain and continue to be such for all the purposes hereinafter provided.

Sec. 2. Board to Succeed the Arid Land Grant Commission.—

The Carey Land Act Board shall be successors of the State Arid Land Grant Commission, which is hereby abolished, and as successor shall perform all duties pertaining to unfinished contracts of said Commission which may be necessary to complete such contracts or to protect the State's interest.

Sec. 3. Membership and Salary.—Said Carey Land Act Board shall consist of the Governor, the State Engineer and the Register of the State Land Office, none of whom shall receive additional compensation for service on said Board.

Sec. 4. Travelling and Office Expenses.—The travelling expenses necessarily incurred by any member of the Board in the performance of his duties as a member of the Board, or by the Secretary of the Board, and necessary office expenses of the Board shall be paid by the State, on sworn statements of account, approved by the State Board of Examiners.

Sec. 5. The Governor to be Chairman.—The Governor shall be chairman of the Carey Land Act Board, and shall sign all contracts made by it. Said Board shall meet at such times and places as the Governor designate, except that in the absence of the Governor an emergency occurring a meeting may be held, but the action of the Board at such meeting shall not be binding until ratified by the Governor.

Sec. 6. Secretary of Board, His Duties. Give Bond.—Said Board shall have a secretary, and may employ as such secretary a clerk, who shall keep a proper record of its transactions, keep its accounts, have charge of funds paid to it, of its correspondence and documents, countersign papers and instruments and perform such other duties as the Board may require. He shall have authority to administer oaths whenever necessary in the performance of his duties as secretary. He shall give a bond for the faithful performance of those duties in an amount to be fixed by the Board.

Sec. 7. Secretary's Salary.—The Secretary's salary shall be fixed by the Board in proportion to services performed, provided the sum shall not exceed one hundred and fifty dollars per month, and shall be paid on orders to the Auditor signed by the Chairman, out of funds not otherwise appropriated.

Sec. 8. Requests and Proposals.—Any person, company or persons, association or incorporated company constructing, having constructed or desiring to construct ditches, canals or other irrigation works to reclaim land under the provisions of this Act, shall file with the Board a request for the selection, on behalf of the State by the Board, of the land to be reclaimed, designating said land by legal subdivisions. This request shall be accompanied by a proposal to construct the ditch, canal or other irrigation works necessary for the complete reclamation of the land asked to be selected. The proposal shall be prepared in accordance with the rules of the Board and with the regulations of the department of the interior. It shall state the source of water supply, the location and dimensions of the proposed works, the estimated cost thereof, the price and terms per acre, at which perpetual rights will be sold or leased to settlers on the land to be reclaimed, said perpetual rights to be inseparable from land reclaimed and to embrace a proportionate interest in the canal or other irrigation works, together with all rights and franchises attached thereto. In the case of incorporated companies it shall state the name of the company, the purpose of its incorporation, the names and places of residence of its directors and officers, the amount of its authorized and of its paid up capital, and how paid, if by cash, note or property. If the applicant is not an incorporated company; the proposal shall set forth the name or names of the party or parties, and such other facts as will enable the Board to determine his or their financial ability to carry out the proposed undertaking, and such other information as the Board may require.

Sec. 9. Guarantee.—A certified check for a sum not less than two hundred and fifty dollars (\$250) nor more than two thousand five hundred dollars (\$2,500) as may be determined by the Board, shall accompany each such request and proposal, the same to be held as guarantee of the execution of the contract with the state, in accordance with its terms, by a party submitting such proposal, in case of the approval of the same and the selection of the land by the Board, and to be forfeited to the state in case of failure of said parties to enter into a contract with the state in accordance with the provisions of this Act.

Sec. 10.—Water Permits and Maps.—The person, company of persons, association or incorporated company making application to the Board for the selection of lands by the state, shall have filed with the State Engineer an application for a permit to appropriate

water for the reclamation of the lands described in the request to the Board. This application for a permit shall be of a form prescribed by the State Engineer, and shall be accompanied by copies of a map of the land to be selected, and which shall show accurately the location and dimensions of the proposed irrigation works. The maps of the lands and proposed irrigation works shall be prepared in accordance with the regulations of the State Engineer's office and the rules of the department of the interior.

Sec. 11. Engineer's Report on Feasibility of Proposed Irrigation Works.—Immediately upon receipt of any request and proposal, as designated in Section Eight (8) it shall be the duty of the Secretary to examine the same and ascertain if it complies with the rules of the Board and the regulations of the department of the interior. If it does not it is to be returned for correction; but if it does so comply it shall be submitted to the State Engineer, who shall examine the same and make a written report to the Board, stating whether or not the proposed works are feasible; whether the proposed diversion of the public water of the state will prove beneficial to the public interest; whether there is sufficient appropriated water in the source of supply and whether or not a permit to divert and appropriate water through the proposed works has been approved by him; whether the capacity of the proposed works is adequate to reclaim the land described; whether or not the proposed cost of construction is reasonable; and whether or not the maps filed in his office comply with the regulations of the department of the interior; also whether the lands proposed to be irrigated are desert in character and such as may be properly set apart under the provisions of the aforesaid Act of Congress and the rules and regulations of the department of the interior thereunder. Whenever the State Engineer shall be unable, from an examination of the maps and field notes submitted for his examination, to determine whether or not the proposed irrigation works are feasible and adequate, whether or not the proposed cost of construction is reasonable, or whether or not the proposed diversion of public water is beneficial to public interest, and whether or not the lands proposed to be irrigated are of such character as to come under the provisions of the aforesaid Act of Congress, the Board may direct the engineer to make, or cause to be made by some qualified assistant, such survey or examination as will enable him to report intelligently thereon to the Board. No member of the Board or any employee thereof shall in any way be interested in any work or contract contemplated by this act.

Sec. 12. Consideration by the Board.—On receipt of the report of the State Engineer, the secretary shall place the request and proposal, with the engineer's report thereon, before the Board for its consideration. In case of approval the Board shall instruct the secretary to file in the local land office a request for the withdrawal of the land described in said proposal.

Sec. 13. Rejection; Time Allowed to Correct.—When requests and proposals are not approved by the Board, the Board shall notify the parties making such proposal of such action and the reason therefor. The parties so notified shall have sixty days in which to submit a satisfactory proposal, but the Board may at its discretion extend the time to six months.

Sec. 14. Terms of Contract with State for Construction With Settler for Water and Land; Bond.—Upon the withdrawal of the land by the department of the interior, it shall be the duty of the Board to enter into a contract with the parties submitting the proposal, which contract shall contain complete specifications of the locations, dimensions, character and estimated cost of the proposed ditch, canal or other irrigation work; the price and terms per acre at which such works and perpetual water rights shall be sold or leased to settlers, the price and terms upon which the state is to dispose of the land to the settlers; Provided, that such price and terms for irrigation works, water rights and for lands to be disposed of by the state to settlers, shall in all cases be reasonable and just. This contract shall not be entered into on the part of the state until the withdrawal of these lands by the department of the interior and the filing of a satisfactory bond on the part of the proposed contractor for irrigation works, which bond shall be in the penal sum of five per cent of the estimated cost of the works, and to be conditioned for the faithful performance of the provisions of the contract with the state. In all contracts let under this act eight hours shall constitute a day's work and no Mongolian shall be employed thereon.

Sec. 15. Time Allowed for Construction.—No contract shall be made by the Board which requires a greater time than five years for the construction of the works, and all contracts shall state that the work shall begin within two months from the date of contract unless such two months expire between the first day of November and first day of May following in which case the time of commencement shall not be later than the first day of May following; that at least one-tenth of the construction work shall be completed within one

year from date of the contract; that construction shall be prosecuted diligently and continuously to completion, and that a cessation of work under the contract with the state for a period of six months, after the second year, will forfeit to the state all rights under said contract.

Sec. 16. Failure to Perform Terms of Contract.—Upon the failure of any parties, having contracts with the state for the construction of irrigation works, to begin the same within the time specified by the contract, or to complete the same within the time or in accordance with the specifications of the contract with the state, it shall be the duty of the secretary to give such parties written notice of such failure, and if, after a period of sixty days from the sending of such notice they shall have failed to proceed with the work or to conform to the specifications of their contract with the state, the bond and contract of such parties and all work constructed thereunder shall be at once and thereby forfeited to the state, and it shall be the duty of the Board at once so to declare and give notice once each week, for a period of four weeks, in some newspaper of general circulation in the county in which work is situated, and in one newspaper at the state capital, in like manner and for a like period, of the forfeiture of said contract, and that upon a day fixed, proposals will be received at the office of the secretary, in the capital at Helena, for the purchase of the incompleted works and for the completion of said contract, the time for receiving said bids to be at least sixty days subsequent to the issuing of the last notice of forfeiture. The money received from sale of partially completed works under the provisions of Section 15 of this Act, shall first be applied to the expenses incurred by the state in their forfeiture and disposal, to satisfying the bond, and the surplus, if any exists, shall be paid to the original contractors with the state.

Sec. 17. State Not Liable.—Nothing in this Act shall be construed as authorizing the Board to obligate the state to pay for any work constructed under any contract, or to hold the state in any way responsible to settlers for the failure of contractors to complete the work according to the terms of their contracts with the state.

Sec. 18. Publication.—Immediately upon the withdrawal of any land for the state by the department of the interior and the inauguration of work by the contractor, it shall be the duty of the Board, by publication once each week, in one newspaper of the county in which said lands are situated, and in one newspaper at the state

capital, for a period of four weeks, to give notice that said land is open for settlement; the price and terms for which said land will be sold or leased to settlers by the state, and the contract price at which settler can purchase or lease perpetual water rights.

Sec. 19. Application for Entry and Nature.—Any citizen of the United States, or any person having declared his intention to become a citizen of the United States, (except the married women, not the heads of families) over the age of twenty-one years, may make application, under oath, to the Board, to enter any of said land in any amount not to exceed one hundred and sixty acres for any one person; and such application shall set forth that the person desiring to make such entry does so for the purpose of actual reclamation, cultivation and settlement in accordance with the Act of Congress and the laws of this state relating thereto, and that the applicant has never received the benefit of the provisions of this Act, to an amount greater than one hundred and sixty acres, including the number of acres specified in the application under consideration. Such application must be accompanied by a certified copy of a contract for a perpetual water right, made and entered into by the party making application with the person, company or association who have been authorized by the Board to furnish water for the reclamation of said lands; and if said applicant has at any previous time entered land under the provisions of this Act, he shall so state in his application, together with description, date of entry and location of said land. The Board shall thereupon file in its office the application and papers relating thereto, and, if allowed, issue a certificate of location to the applicant. All applications for entry shall be accompanied by a payment of twenty-five cents per acre, which shall be paid as partial payment on the land if the application is allowed; and all certificates when issued shall be recorded in a book to be kept for that purpose. If the application is not allowed the twenty-five cents per acre accompanying it shall be returned to the applicant; Provided, that where the construction company fails to furnish water to any settler under the provisions of its contract with the state, the state shall refund to such settler all payments that he shall have made to the state.

Sec. 20. Land to be classified, Price and Terms.—The Board shall cause to be classified by some competent person or persons all lands segregated under this act, the expense for which shall be paid by the state out of funds in the Carey Land Act Fund if any, if none, then out of funds not otherwise appropriated, upon vouch-

ers duly approved by the Board. This work shall be done before any filings are accepted when certificates of filing are issued said certificates shall specify the class and price of land it covers. The Board shall sell or lease any or all of the lands accepted by the state under the provisions of this act in quantity not to exceed one hundred and sixty acres to one individual; the prices and terms of such sale or lease to be fixed by the Board in proportion to the different classes of land; Provided the selling price shall not be less than fifty cents per acre nor in excess of Two Dollars and fifty cents (\$2 50) per acre, and twenty-five cents (25) per acre shall in all cases be paid by applicants at time of filing.

Sec. 21. Receipts, Expenditures and Trust Fund.—As provided in the Act of Congress all moneys received by the Board from the sale or lease of lands selected under the provisions of this Act shall be deposited with the State Treasurer to the credit of the Carey Land Act Fund, and such sums as may be necessary shall be available for the payment of the expenses of the Board and of the State Engineer's office in carrying out the provisions of this Act. Such expenses shall be paid by the State Auditor in the manner provided by law upon vouchers duly approved by the Board for work performed under its direction, and by the State Engineer for all work performed by the State Engineer's office; and any balance remaining over and above the expense necessary to carry out the provisions of this Act shall be used to pay warrants issued by the predecessor of this Board for expenses incurred in Districts No. one (1) and two (2) and four (4) and open accounts which are now credited on the ledger of the Arid Land Grant Commission to sundry persons for supplies furnished in District one and two, and four; the aggregate of foregoing obligations being, without interest, \$18,607.45; and any balance remaining after payment of these obligations shall constitute a trust fund in the hands of the state treasurer to be used only in the reclamation of other arid lands.

Sec. 22. Reclamation, When to Begin. Final Proof.—Within one year after any person, company of persons, association or incorporated company authorized to construct irrigation works under the provisions of this Act, shall have notified the settlers under such works that they are prepared to furnish water under the terms of their contract with the state, the said settler shall reclaim and cultivate not less than ten acres of the land filed upon and within two years after the said notice the settler shall have actually irrigated and cultivated not less than twenty acres of the land filed upon, and

within three years from the date of said notice the settler shall appear either before the secretary of the Board, a judge or clerk of the district court or United States circuit court commissioner, to be designated by the Board, within the state, and make final proof of reclamation settlement and occupation, which proof shall embrace evidence that he has a perpetual water right for his entire tract of land sufficient in volume for the complete irrigation and reclamation thereof; that he is an actual settler thereon, and has cultivated and irrigated not less than 20 acres of said tract, and such proof further, if any, as may be required by the regulations of the department of the interior and the Board. The officer taking this proof shall be entitled to receive a fee of two dollars, which fee shall be paid by the settlers and shall be in addition to the price paid for the land. All proofs so received shall be submitted by the secretary to the Board and shall be accompanied by the last and final payment for said land, and on the approval of the same by the said Board patent shall be issued to settler; Provided, that when the secretary shall take such final proof all fees received by him shall be turned into the state treasury.

Sec. 23. Failure—Relinquish.—In event a settler fails to reclaim and cultivate the required ten acres within one year after water is available for use thereon, said settler must relinquish his right to all land filed on, or if the settler leave the country and relinquishment can not be had then his rights shall be forfeited to any and all land he may have filed on under the provisions of this Act.

Sec. 24. Water Rights Appurtenant,—Prior Liens to Land. Foreclosure.—It shall be the duty of the Board to issue patents to settlers who have complied with all the requirements for patent, under the signature of its president and attested by its secretary.

The water rights to all lands acquired under the provisions of this Act shall attach to and become appurtenant to the land as soon as title passes from the United States to the state. Any person, company or association, furnishing water for any tract of land shall have a first and prior lien on said water right and land upon which said water is used, for all deferred payments for said water right; said lien to be in all respects prior to any and all other liens created or attempted to be created by the owner or possessor of said land; said lien to remain in full force and effect until the last deferred payment for the water right upon which the aforesaid lien is founded shall be recorded in the office of the county clerk of the county

where said land is situated. Upon default of any of the deferred payments secured by any lien under the provisions of this Act, the person, company of persons, association or incorporated company holding or owning said lien, may foreclose the same according to the terms and conditions of the contract granting and selling to the settler the water right. All sales shall be advertised in a newspaper of general circulation, published in the county where said land and water right is situate, for six consecutive weeks, and shall be sold to the highest bidder at the front door of the court house of the county, or such place as may be agreed upon by the terms of the aforesaid contract. And the sheriff of said county shall in all such cases give all notices of sale and shall sell all such land and water rights and shall make and execute a certificate of sale to the purchaser thereof, and at such sale no person, company of persons, association or incorporated company, owning and holding any lien shall bid in or purchase any land or water right at a greater price than the amount due on deferred payment for said water right and land, and the costs incurred in making the sale of said land and water right. At any time within twelve months after the foreclosure sale by the sheriff of the land and water right as aforesaid, the original owner against whom the lien has been foreclosed, may apply to the person, company of persons, association or incorporated company purchasing at such sale, to redeem said land and water rights, and the purchaser shall assign the certificate of sale of such land and water rights to such original owner, upon the payment by him within such twelve months, of the amount of the lien for which the same was sold at such foreclosure sale, together with the legal interest, cost and fixed charges thereon. Where the lien holder becomes the purchaser at such foreclosure sale, if such lands and water rights are not redeemed by the original owner within twelve months, then at any time within three months after the expiration of such twelve months, any person desiring to settle and use such lands and water rights may apply to the purchaser at such foreclosure sale to redeem such land and water rights, and such purchaser shall assign the certificate of sale of such land and water rights to the person desiring to redeem the same, upon the payment by him, within such three months, of the amount of the lien for which the same was sold at such foreclosure sale, together with the interest, costs and fixed charges thereon. Upon issuing any certificate of sale, it shall be the duty of the sheriff to file for record in the office of the county clerk of the county where such land is situated, a certified copy of such certificate of sale, and in case the

original owner shall redeem the land and water rights sold as aforesaid, he shall file for record in the office of such county clerk the certificate of sale assigned to him by the purchaser as aforesaid, upon his redemption of such land and water rights. In case the land and water rights shall be redeemed by any person other than the original owner, the sheriff shall, upon presentation of such certificate, issue a deed for such land and water rights to the person redeeming the same. If the land and water rights shall not be redeemed by any person within the time and in the manner hereinbefore provided, it shall be the duty of the sheriff, upon presentation of certificate of sale by the original purchaser, to issue a deed to such purchaser. Where such land and water rights are not purchased by the lien holder of such foreclosure sale, it shall be the duty of the sheriff to first pay the lien holder out of the proceeds of such sale the amount of the lien together with all interest, costs and fixed charges thereon, and to pay any balance remaining to the person against whom such lien has been foreclosed, and for his services in such cases the sheriff shall receive the same fees as are provided by law in civil cases.

Under no circumstances shall a lien be foreclosed against land belonging to the state and unfilled on by an individual.

Sec. 25. Right of Way of Canal.—The maps in the office of the Board, of the lands selected under the provisions of this Act, shall show the location of the canals or other irrigation works approved in contract with the Board, and all lands filed upon shall be subject to the rights of way of such canals or irrigation works. Said right of way to embrace the entire width of the canal and such additional width as may be required for its proper operation and maintenance, the width of the right of way to be specified in the contracts provided for in this Act.

Sec. 26. Rules and Requirements.—Any person, incorporated company, or association who shall arrange with the Board to have lands segregated for reclamation under the provisions of this Act shall pay the land office fees and have the maps made which are necessary to such segregation. Any person or company entering into a contract to construct a canal or other irrigation work and sell water rights to settlers shall not only construct the canal or other irrigation works but must maintain same and operate it until at least ninety per cent of the shares are sold and paid for when it shall be turned over to the settlers thereunder who shall thereafter maintain and operate it. The person or company can collect from

each settler not to exceed sixteen dollars per year, for each share, or shares representing forty acres, for expense of maintenance, operation and superintendence of said canal. The person or company reclaiming lands under this Act must put settlers on the land; and may sell the perpetual water rights to such settlers at prices to be agreed upon but which shall not exceed twelve dollars and fifty cents per acre. The Board shall provide suitable rules for the filing of proposals for constructing irrigating works, and for the forfeiting of entry by settlers upon failure to comply with the provisions of this Act. There shall be kept in the office of the Board, for public inspection, copies of all maps, plats, contracts for the construction of irrigation works, and of the entries of land by settlers. It shall require from each person, company of persons or association or incorporated company engaged in the construction of irrigation works under the provisions of this Act, an annual report to be submitted to the Board on or before Nov. 1, of each year. This report shall show the number of water rights sold, amount paid thereon, the number leased and amount received thereon, the number of users of water under said irrigation works, the number of acres under actual irrigation, the names of the offices of the company, the acreage of land which the said irrigation works is prepared to supply with water, and such other data as the Board sees fit to require. The rules required by this section may be waived in the case of irrigation works being constructed by a person, colony or association of persons to furnish water for land settled upon and being reclaimed by themselves.

Sec. 27. Fees—The Board shall prescribe the duties of all its employees, shall use a seal and shall collect the following fees:

For filing each application, one dollar; for filing each final proof, one dollar; for issuing each patent, one dollar; for making certified copies of papers or records, the same fees as provided for to be charged by the Secretary of State for like services. The money collected for fees shall be paid to the State Treasurer on the last day of each month, and by him credited to the Carey Land Act Fund created by virtue of this Act.

Sec. 28. Report of Board.—The Board shall issue on or before Nov. 30th of each year a report setting forth in detail the names, location and character of the irrigation works in process of construction, the acreage and legal subdivisions of land intended to be reclaimed, the estimated cost of said irrigation works, the price of water rights from such irrigation works, and the terms of payment

for both water rights and land. Not less than three thousand copies of such report shall be issued for gratuitous distribution.

Sec. 29. Suits by Board.—All suits or actions brought by the Board, under the provisions of this Act, shall be instituted by the Board in the name of the people of the State of Montana.

Sec. 30. Repealing Existing Laws.—Title VIII, Part III of the Political Code of this State, Sections 3530 to 3547 inclusive, and the act of the Legislature of this State, approved March 5th, 1897, entitled "An Act to amend Sections 3530, 3531, 3532, 3533, 3534, 3535, 3536, 3537, 3538, 3539, 3540, 3541, 3542, 3543, 3544, 3545, 3546, 3547 Article II, Title VIII, Part III of the Political Code of the State of Montana, creating the State Arid Land Grant Commission and defining its powers and duties, and to add thereto Sections 3548, 3549, 3550, 3551, 3552, 3553, 3554, 3555, 3556, 3557, 3558, 3559, 3559a, 3559b, 3559c, 3559d, 3559e, 3559f To provide for the reclamation of arid lands granted to the State of Montana by acts of Congress and to provide for the issuance of bands and the appropriation of money for the carrying of this act into effect and the payment of expenses heretofore incurred and warrants heretofore issued by the State Arid Land Grant Commission, and an Act of the Legislature of this State, approved February 27, 1899, entitled "An Act to Amend Article II, Title VIII, Part III, of the Political Code of the State of Montana, creating the State Arid Land Commission and defining its powers and duties, and all acts and parts of acts amendatory thereof; by providing for the purchase and reclamation of certain lands situated in the County of Yellowstone and State of Montana by the issue of bonds, by adding thereto the following:" and all other laws and parts of laws in conflict with this act, are hereby repealed.

Sec. 31. When Effective.—This Act shall take effect and be in force from and after its passage.



